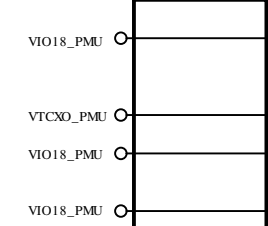
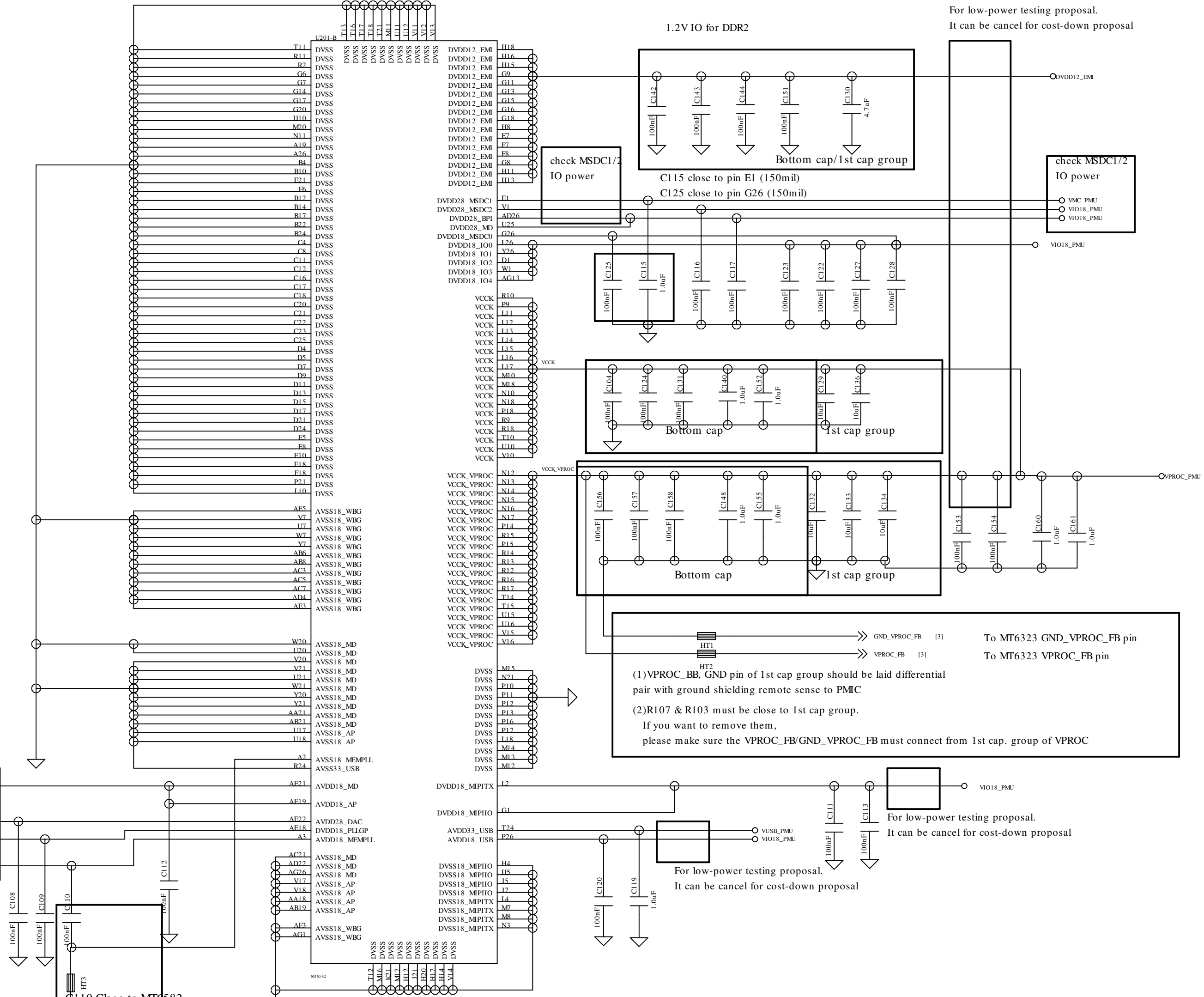


For low-power testing proposal.
It can be cancel for cost-down proposal



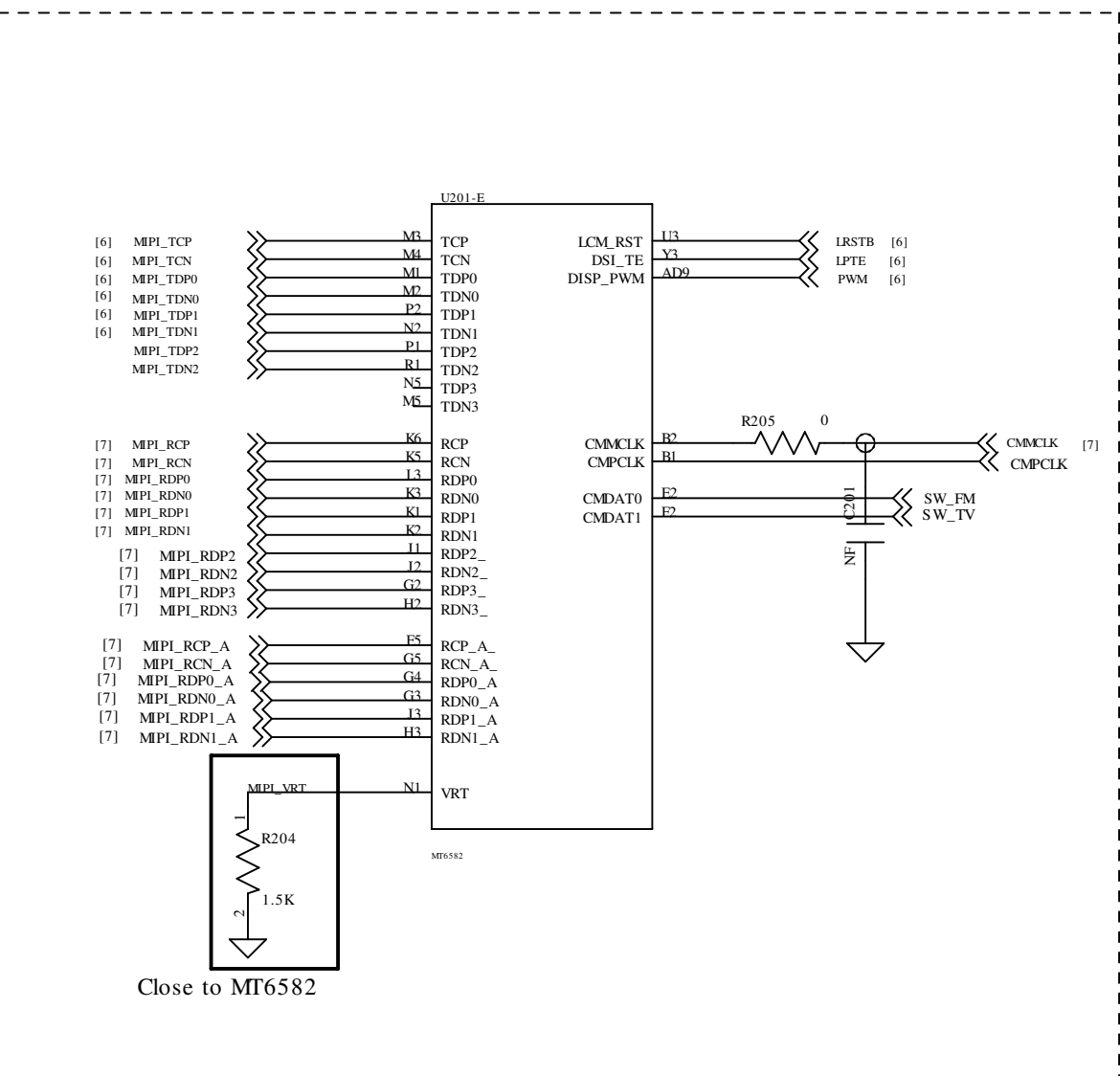
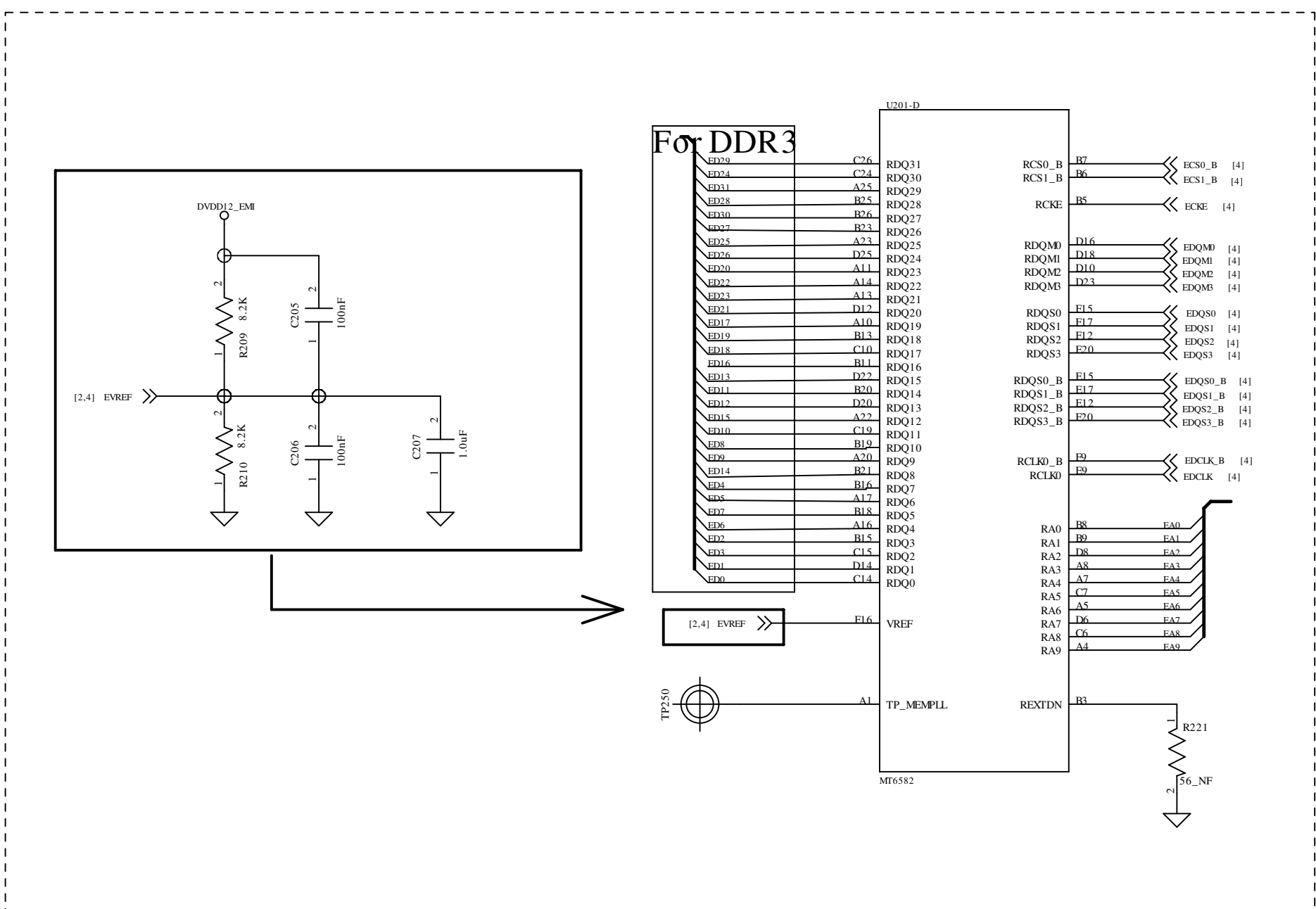
C110 Close to MT6582
A2 should connect to C110.GND pin first
then connect to GND by via



(1)VPROC_BR_GND pin of 1st cap group should be laid differential pair with ground shielding remote sense to PMC
(2)R107 & R103 must be close to 1st cap group.
If you want to remove them,
please make sure the VPROC_FB/GND_VPROC_FB must connect from 1st cap_group of VPROC

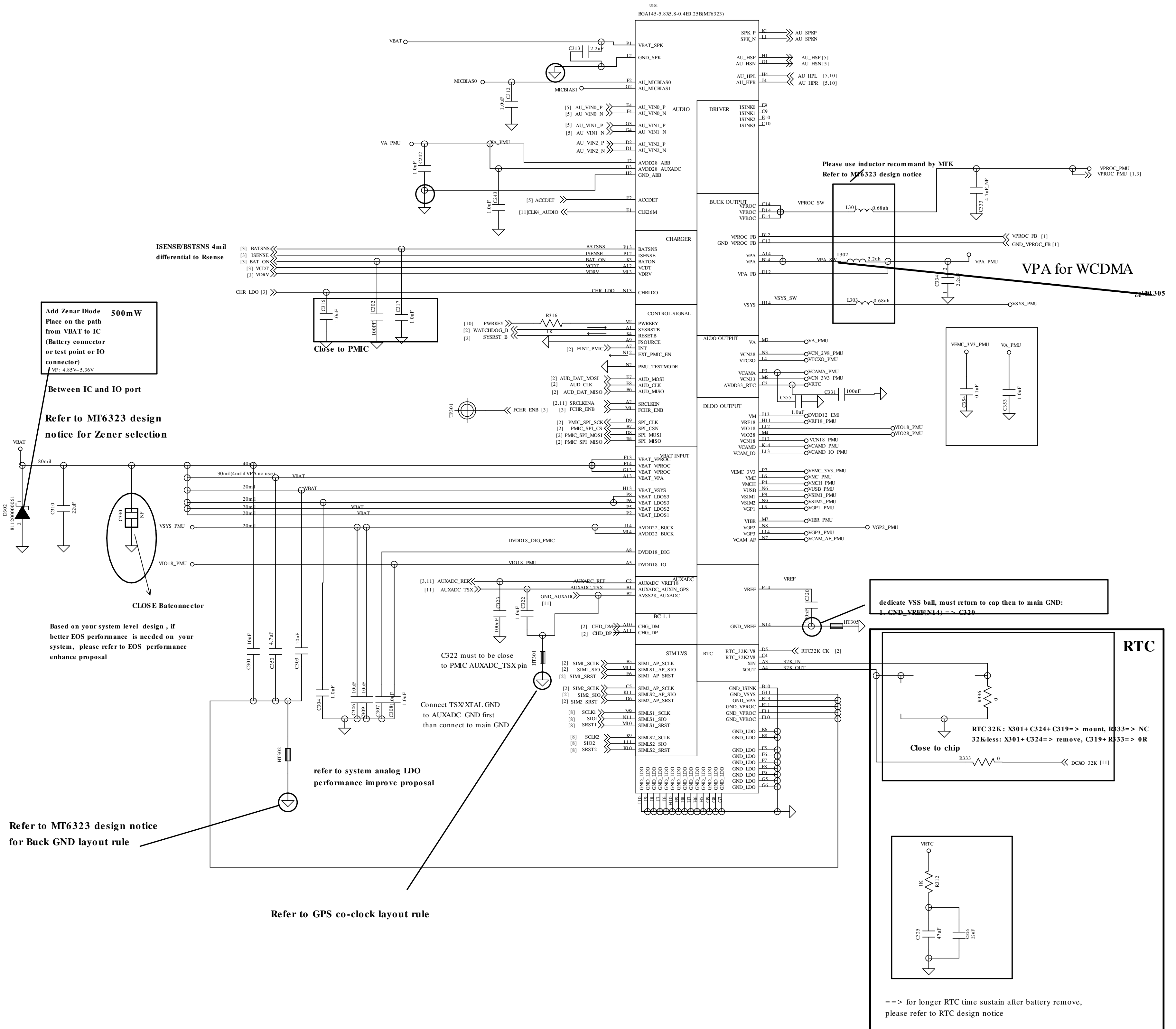
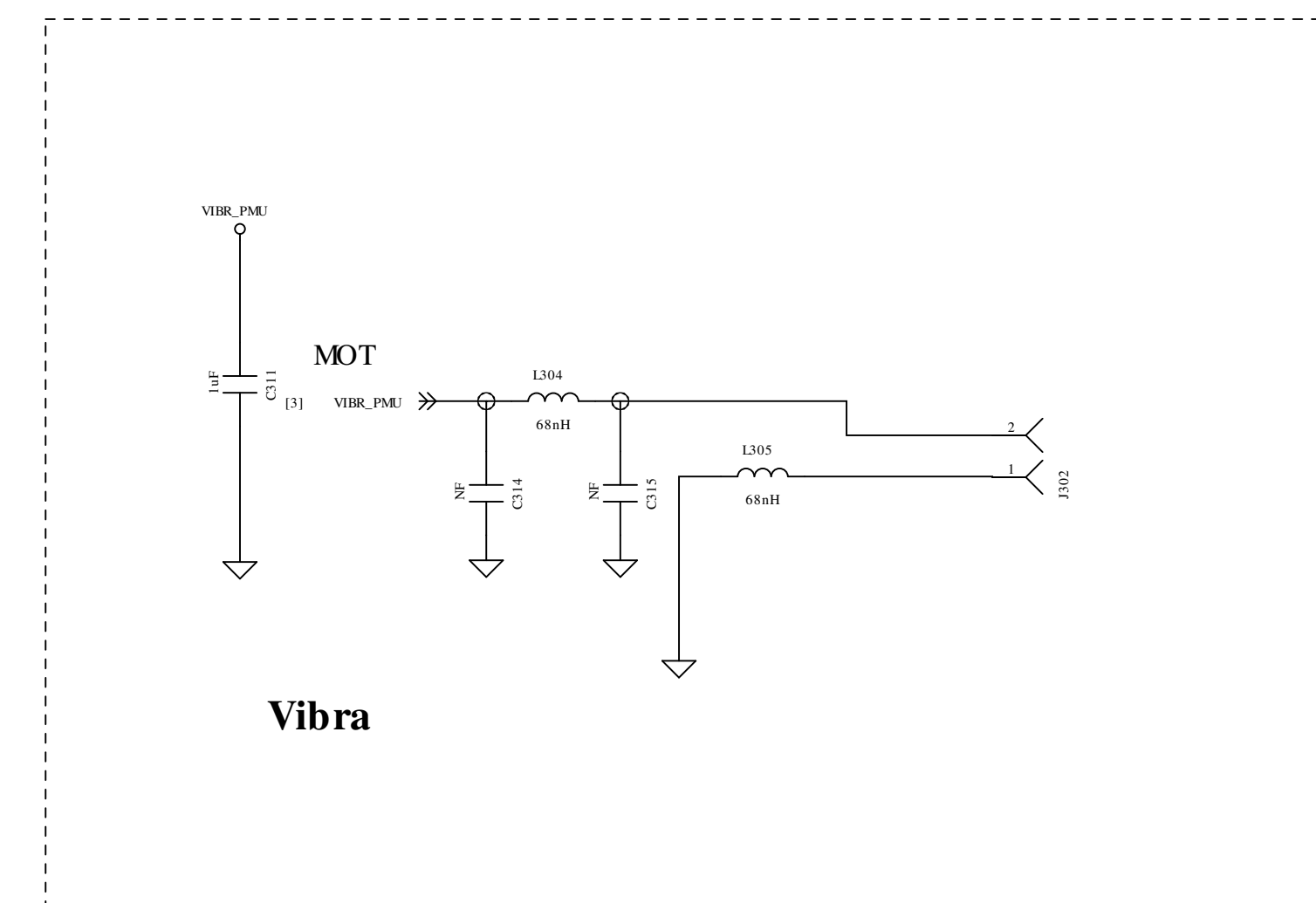
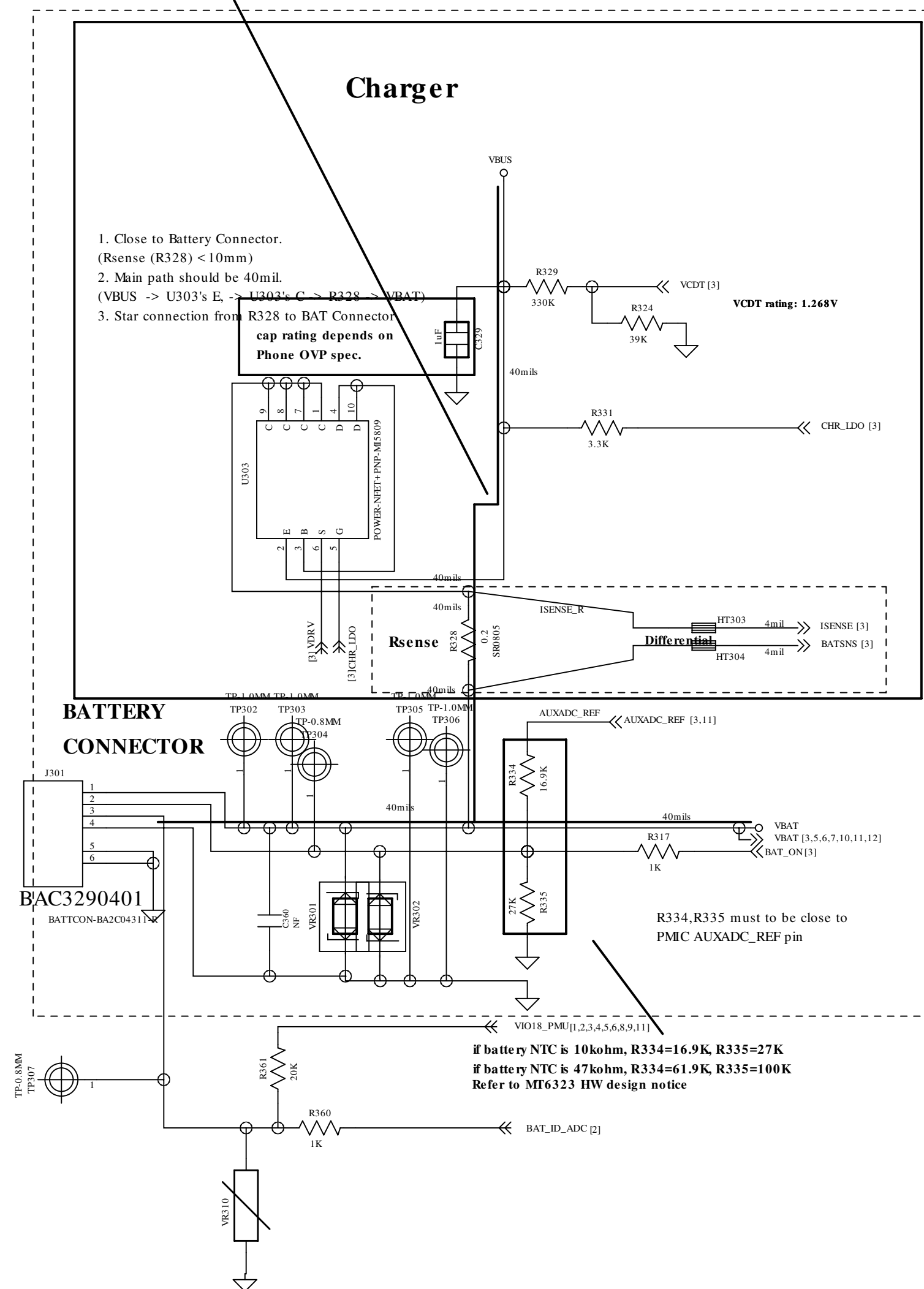
For low-power testing proposal.
It can be cancel for cost-down proposal

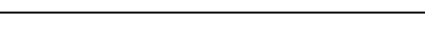
For low-power testing proposal.
It can be cancel for cost-down proposal

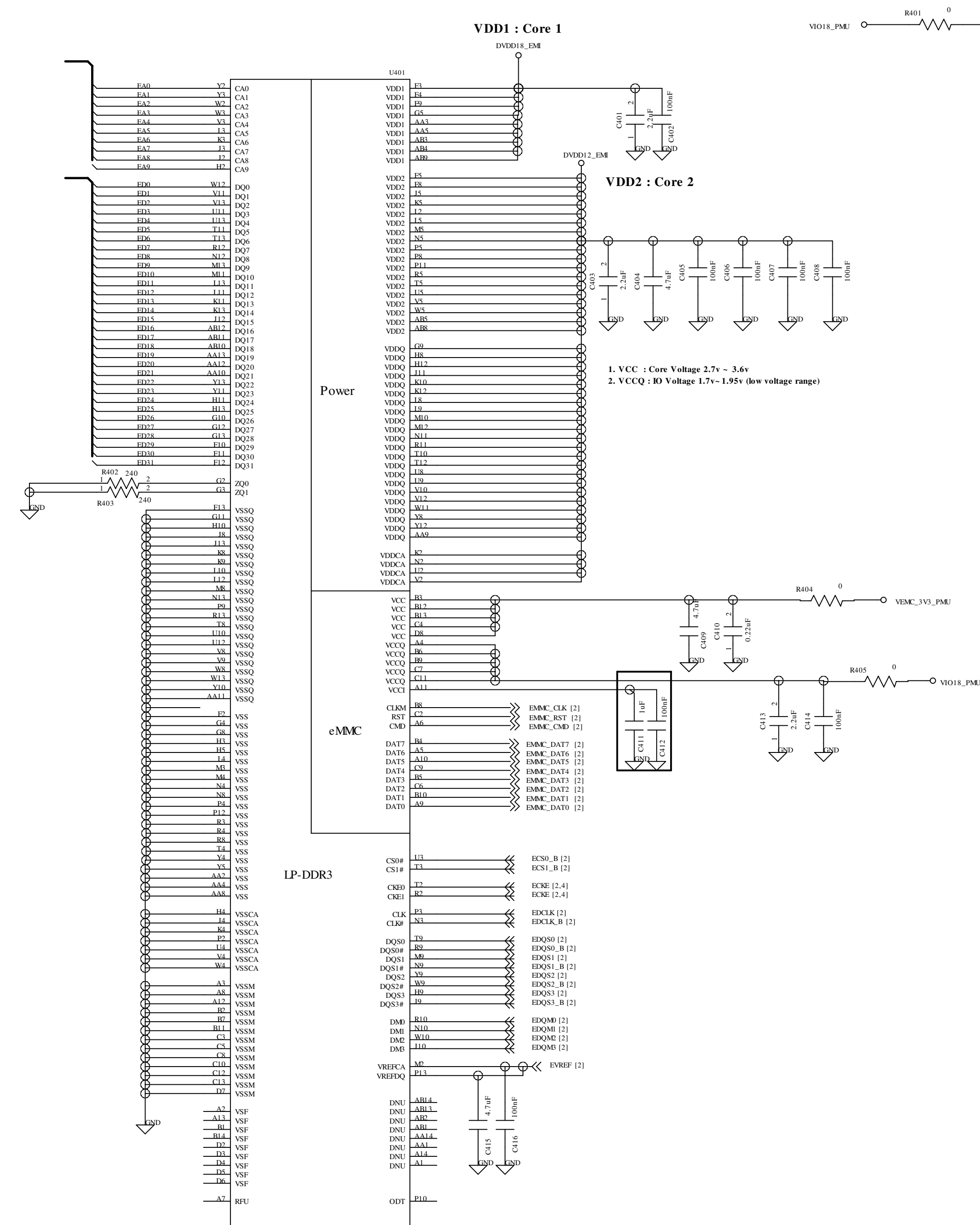


<Parallel Cam./MPI CSI Mux Table>		
MPI CSI IF Port	Parallel Camera IF Port	
RDP2		CMDAT9
RDN2		CMDAT8
RDP3		CMDAT5
RDN3		CMDAT4
RCP_A		CMDAT7
RCL_A		CMDAT6
RDNP_A		CMDSYNC
RDNP_A		CMDSYNC
RDP1_A		CMDAT3
RDN1_A		CMDAT2
CMDAT1		CMDAT1
CMDAT0		CMDAT0
CMCLK	CMCLK	
CMCLK	CMCLK	

**Before you select BJT , please take power dissipation into consideration.
Refer to MT6323 design notice**



TITLE: LUU-U23		REV: V1.3
DOCUMENT NO.: 03_MT6323_PMIC_AUDIO	SIZED: A1	
DEPARTMENT: Hardware DEPT.		
COMPANY: 		
DESIGNER: < DESIGNER >	Last Saved Date: 2015/12/7	SHEET: 3 OF 13



Receiver

Handset Microphone

Handset Microphone

Diagram illustrating the Handset Microphone circuit, showing connections to the microphone (MICBIA50) and various input/output pins (AU_VINL_P, AU_VINL_N, AU_VIN0_N, AU_VIN0_P-1, AU_VIN0_N-1).

The circuit includes several components:

- Resistors: R274 (10K), R273 (10K), R272 (10K), R271 (10K), R270 (10K), and a 4.7K resistor.
- Capacitors: CS22 (100nF), CS23 (100nF), CS24 (100nF), CS25 (100nF), CS26 (100nF), and CS27 (100nF).

The circuit is divided into two sections by a dashed line labeled "Close to BB" and "Close to MIC".

Connections on the left side (Close to BB):

- AU_VINL_P is connected to CS22 (100nF) and R274 (10K).
- AU_VINL_N is connected to CS23 (100nF) and R273 (10K).
- AU_VIN0_N is connected to R272 (10K) and R271 (10K).

Connections on the right side (Close to MIC):

- AU_VIN0_P-1 is connected to CS24 (100nF) and R270 (10K).
- AU_VIN0_N-1 is connected to CS25 (100nF) and R270 (10K).

The microphone (MICBIA50) is connected to the circuit through a series of resistors (R274, R273, R272, R271, R270) and capacitors (CS22, CS23, CS24, CS25, CS26, CS27).

Ground connections are shown at the bottom left and bottom right.

together then single via to main GND

K-Class Audio PA

The schematic diagram illustrates a K-Class Audio PA circuit. The central component is the AUDIO-AMP-AW8736 IC, which is powered by VBAT and VDD. The circuit includes a U501 MOSFET for power amplification. The output is connected to SPK_P [6] and SPK_N [6]. The circuit also includes a speaker (SPK) and various passive components like resistors (R525, R526, R527, R528), capacitors (C528, C529, C530, C531, C532, C533, C534, C535, C536, C537, C538, C539, C540), and a speaker (SPK). The circuit is powered by VBAT and VDD. The output is connected to SPK_P [6] and SPK_N [6].

The diagram illustrates a PCB layout for an Earphone Audio system. Key components and annotations include:

- Earphone Audio**: A title at the top left.
- Reserve bead+C footprint for FM performance tuning**: A note pointing to a specific component footprint.
- close to IC**: A note pointing to a component footprint.
- close to connector**: A note pointing to a component footprint.
- same power domain**: A note pointing to a component footprint.
- CTIA:L-R-G-M**: A note pointing to a component footprint.
- Single via to GND plane**: A note pointing to a via.
- Components and Traces**: The layout includes various components such as resistors (R501, R502, R503, R504, R505, R506, R507, R508, R509, R510), capacitors (C501, C502, C503, C504, C505, C506, C507, C508, C509, C510, C511), inductors (BEAD501, BEAD502, BEAD503, BEAD504, BEAD505), and diodes (V501, V502, V503, V504). It also shows traces for HP_MP3L-OUT, HP_MP3R-OUT, HP_MP3L-1, HP_MP3R-1, HP_MP3L-2, HP_MP3R-2, HP_MP3L-3, HP_MP3R-3, HP_MP3L-4, HP_MP3R-4, HP_MP3L-5, HP_MP3R-5, HP_MP3L-6, HP_MP3R-6, HP_MP3L-7, HP_MP3R-7, HP_MP3L-8, HP_MP3R-8, HP_MP3L-9, HP_MP3R-9, HP_MP3L-10, HP_MP3R-10, HP_MP3L-11, HP_MP3R-11, HP_MP3L-12, HP_MP3R-12, HP_MP3L-13, HP_MP3R-13, HP_MP3L-14, HP_MP3R-14, HP_MP3L-15, HP_MP3R-15, HP_MP3L-16, HP_MP3R-16, HP_MP3L-17, HP_MP3R-17, HP_MP3L-18, HP_MP3R-18, HP_MP3L-19, HP_MP3R-19, HP_MP3L-20, HP_MP3R-20, HP_MP3L-21, HP_MP3R-21, HP_MP3L-22, HP_MP3R-22, HP_MP3L-23, HP_MP3R-23, HP_MP3L-24, HP_MP3R-24, HP_MP3L-25, HP_MP3R-25, HP_MP3L-26, HP_MP3R-26, HP_MP3L-27, HP_MP3R-27, HP_MP3L-28, HP_MP3R-28, HP_MP3L-29, HP_MP3R-29, HP_MP3L-30, HP_MP3R-30, HP_MP3L-31, HP_MP3R-31, HP_MP3L-32, HP_MP3R-32, HP_MP3L-33, HP_MP3R-33, HP_MP3L-34, HP_MP3R-34, HP_MP3L-35, HP_MP3R-35, HP_MP3L-36, HP_MP3R-36, HP_MP3L-37, HP_MP3R-37, HP_MP3L-38, HP_MP3R-38, HP_MP3L-39, HP_MP3R-39, HP_MP3L-40, HP_MP3R-40, HP_MP3L-41, HP_MP3R-41, HP_MP3L-42, HP_MP3R-42, HP_MP3L-43, HP_MP3R-43, HP_MP3L-44, HP_MP3R-44, HP_MP3L-45, HP_MP3R-45, HP_MP3L-46, HP_MP3R-46, HP_MP3L-47, HP_MP3R-47, HP_MP3L-48, HP_MP3R-48, HP_MP3L-49, HP_MP3R-49, HP_MP3L-50, HP_MP3R-50, HP_MP3L-51, HP_MP3R-51, HP_MP3L-52, HP_MP3R-52, HP_MP3L-53, HP_MP3R-53, HP_MP3L-54, HP_MP3R-54, HP_MP3L-55, HP_MP3R-55, HP_MP3L-56, HP_MP3R-56, HP_MP3L-57, HP_MP3R-57, HP_MP3L-58, HP_MP3R-58, HP_MP3L-59, HP_MP3R-59, HP_MP3L-60, HP_MP3R-60, HP_MP3L-61, HP_MP3R-61, HP_MP3L-62, HP_MP3R-62, HP_MP3L-63, HP_MP3R-63, HP_MP3L-64, HP_MP3R-64, HP_MP3L-65, HP_MP3R-65, HP_MP3L-66, HP_MP3R-66, HP_MP3L-67, HP_MP3R-67, HP_MP3L-68, HP_MP3R-68, HP_MP3L-69, HP_MP3R-69, HP_MP3L-70, HP_MP3R-70, HP_MP3L-71, HP_MP3R-71, HP_MP3L-72, HP_MP3R-72, HP_MP3L-73, HP_MP3R-73, HP_MP3L-74, HP_MP3R-74, HP_MP3L-75, HP_MP3R-75, HP_MP3L-76, HP_MP3R-76, HP_MP3L-77, HP_MP3R-77, HP_MP3L-78, HP_MP3R-78, HP_MP3L-79, HP_MP3R-79, HP_MP3L-80, HP_MP3R-80, HP_MP3L-81, HP_MP3R-81, HP_MP3L-82, HP_MP3R-82, HP_MP3L-83, HP_MP3R-83, HP_MP3L-84, HP_MP3R-84, HP_MP3L-85, HP_MP3R-85, HP_MP3L-86, HP_MP3R-86, HP_MP3L-87, HP_MP3R-87, HP_MP3L-88, HP_MP3R-88, HP_MP3L-89, HP_MP3R-89, HP_MP3L-90, HP_MP3R-90, HP_MP3L-91, HP_MP3R-91, HP_MP3L-92, HP_MP3R-92, HP_MP3L-93, HP_MP3R-93, HP_MP3L-94, HP_MP3R-94, HP_MP3L-95, HP_MP3R-95, HP_MP3L-96, HP_MP3R-96, HP_MP3L-97, HP_MP3R-97, HP_MP3L-98, HP_MP3R-98, HP_MP3L-99, HP_MP3R-99, HP_MP3L-100, HP_MP3R-100, HP_MP3L-101, HP_MP3R-101, HP_MP3L-102, HP_MP3R-102, HP_MP3L-103, HP_MP3R-103, HP_MP3L-104, HP_MP3R-104, HP_MP3L-105, HP_MP3R-105, HP_MP3L-106, HP_MP3R-106, HP_MP3L-107, HP_MP3R-107, HP_MP3L-108, HP_MP3R-108, HP_MP3L-109, HP_MP3R-109, HP_MP3L-110, HP_MP3R-110, HP_MP3L-111, HP_MP3R-111, HP_MP3L-112, HP_MP3R-112, HP_MP3L-113, HP_MP3R-113, HP_MP3L-114, HP_MP3R-114, HP_MP3L-115, HP_MP3R-115, HP_MP3L-116, HP_MP3R-116, HP_MP3L-117, HP_MP3R-117, HP_MP3L-118, HP_MP3R-118, HP_MP3L-119, HP_MP3R-119, HP_MP3L-120, HP_MP3R-120, HP_MP3L-121, HP_MP3R-121, HP_MP3L-122, HP_MP3R-122, HP_MP3L-123, HP_MP3R-123, HP_MP3L-124, HP_MP3R-124, HP_MP3L-125, HP_MP3R-125, HP_MP3L-126, HP_MP3R-126, HP_MP3L-127, HP_MP3R-127, HP_MP3L-128, HP_MP3R-128, HP_MP3L-129, HP_MP3R-129, HP_MP3L-130, HP_MP3R-130, HP_MP3L-131, HP_MP3R-131, HP_MP3L-132, HP_MP3R-132, HP_MP3L-133, HP_MP3R-133, HP_MP3L-134, HP_MP3R-134, HP_MP3L-135, HP_MP3R-135, HP_MP3L-136, HP_MP3R-136, HP_MP3L-137, HP_MP3R-137, HP_MP3L-138, HP_MP3R-138, HP_MP3L-139, HP_MP3R-139, HP_MP3L-140, HP_MP3R-140, HP_MP3L-141, HP_MP3R-141, HP_MP3L-142, HP_MP3R-142, HP_MP3L-143, HP_MP3R-143, HP_MP3L-144, HP_MP3R-144, HP_MP3L-145, HP_MP3R-145, HP_MP3L-146, HP_MP3R-146, HP_MP3L-147, HP_MP3R-147, HP_MP3L-148, HP_MP3R-148, HP_MP3L-149, HP_MP3R-149, HP_MP3L-150, HP_MP3R-150, HP_MP3L-151, HP_MP3R-151, HP_MP3L-152, HP_MP3R-152, HP_MP3L-153, HP_MP3R-153, HP_MP3L-154, HP_MP3R-154, HP_MP3L-155, HP_MP3R-155, HP_MP3L-156, HP_MP3R-156, HP_MP3L-157, HP_MP3R-157, HP_MP3L-158, HP_MP3R-158, HP_MP3L-159, HP_MP3R-159, HP_MP3L-160, HP_MP3R-160, HP_MP3L-161, HP_MP3R-161, HP_MP3L-162, HP_MP3R-162, HP_MP3L-163, HP_MP3R-163, HP_MP3L-164, HP_MP3R-164, HP_MP3L-165, HP_MP3R-165, HP_MP3L-166, HP_MP3R-166, HP_MP3L-167, HP_MP3R-167, HP_MP3L-168, HP_MP3R-168, HP_MP3L-169, HP_MP3R-169, HP_MP3L-170, HP_MP3R-170, HP_MP3L-171, HP_MP3R-171, HP_MP3L-172, HP_MP3R-172, HP_MP3L-173, HP_MP3R-173, HP_MP3L-174, HP_MP3R-174, HP_MP3L-175, HP_MP3R-175, HP_MP3L-176, HP_MP3R-176, HP_MP3L-177, HP_MP3R-177, HP_MP3L-178, HP_MP3R-178, HP_MP3L-179, HP_MP3R-179, HP_MP3L-180, HP_MP3R-180, HP_MP3L-181, HP_MP3R-181, HP_MP3L-182, HP_MP3R-182, HP_MP3L-183, HP_MP3R-183, HP_MP3L-184, HP_MP3R-184, HP_MP3L-185, HP_MP3R-185, HP_MP3L-186, HP_MP3R-186, HP_MP3L-187, HP_MP3R-187, HP_MP3L-188, HP_MP3R-188, HP_MP3L-189, HP_MP3R-189, HP_MP3L-190, HP_MP3R-190, HP_MP3L-191, HP_MP3R-191, HP_MP3L-192, HP_MP3R-192, HP_MP3L-193, HP_MP3R-193, HP_MP3L-194, HP_MP3R-194, HP_MP3L-195, HP_MP3R-195, HP_MP3L-196, HP_MP3R-196, HP_MP3L-197, HP_MP3R-197, HP_MP3L-198, HP_MP3R-198, HP_MP3L-199, HP_MP3R-199, HP_MP3L-200, HP_MP3R-200, HP_MP3L-201, HP_MP3R-201, HP_MP3L-202, HP_MP3R-202, HP_MP3L-203, HP_MP3R-203, HP_MP3L-204, HP_MP3R-204, HP_MP3L-205, HP_MP3R-205, HP_MP3L-206, HP_MP3R-206, HP_MP3L-207, HP_MP3R-207, HP_MP3L-208, HP_MP3R-208, HP_MP3L-209, HP_MP3R-209, HP_MP3L-210, HP_MP3R-210, HP_MP3L-211, HP_MP3R-211, HP_MP3L-212, HP_MP3R-212, HP_MP3L-213, HP_MP3R-213, HP_MP3L-214, HP_MP3R-214, HP_MP3L-215, HP_MP3R-215, HP_MP3L-216, HP_MP3R-216, HP_MP3L-217, HP_MP3R

Analog Switch

IN=0, COM Connected to NC;
 IN=1, COM Connected to NO;

Earphone MICPHONE

Earphone MICPHONE

Close to BB

Close to MIC

GND of C(4.7uF) and headset should tie together and single via to GND plane

Close to Eardack

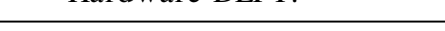
together then single via to main GND

TITLE:	LUA-U23	REV:	V1.3
DOCUMENT NO.:	05_AUDIO	SIZED:	A1
DEPARTMENT:	Hardware DEPT.		
COMPANY:			
DESIGNER: <DESIGNER>	Last Saved Date:	2015/12/7	SHEET: 5 OF 13

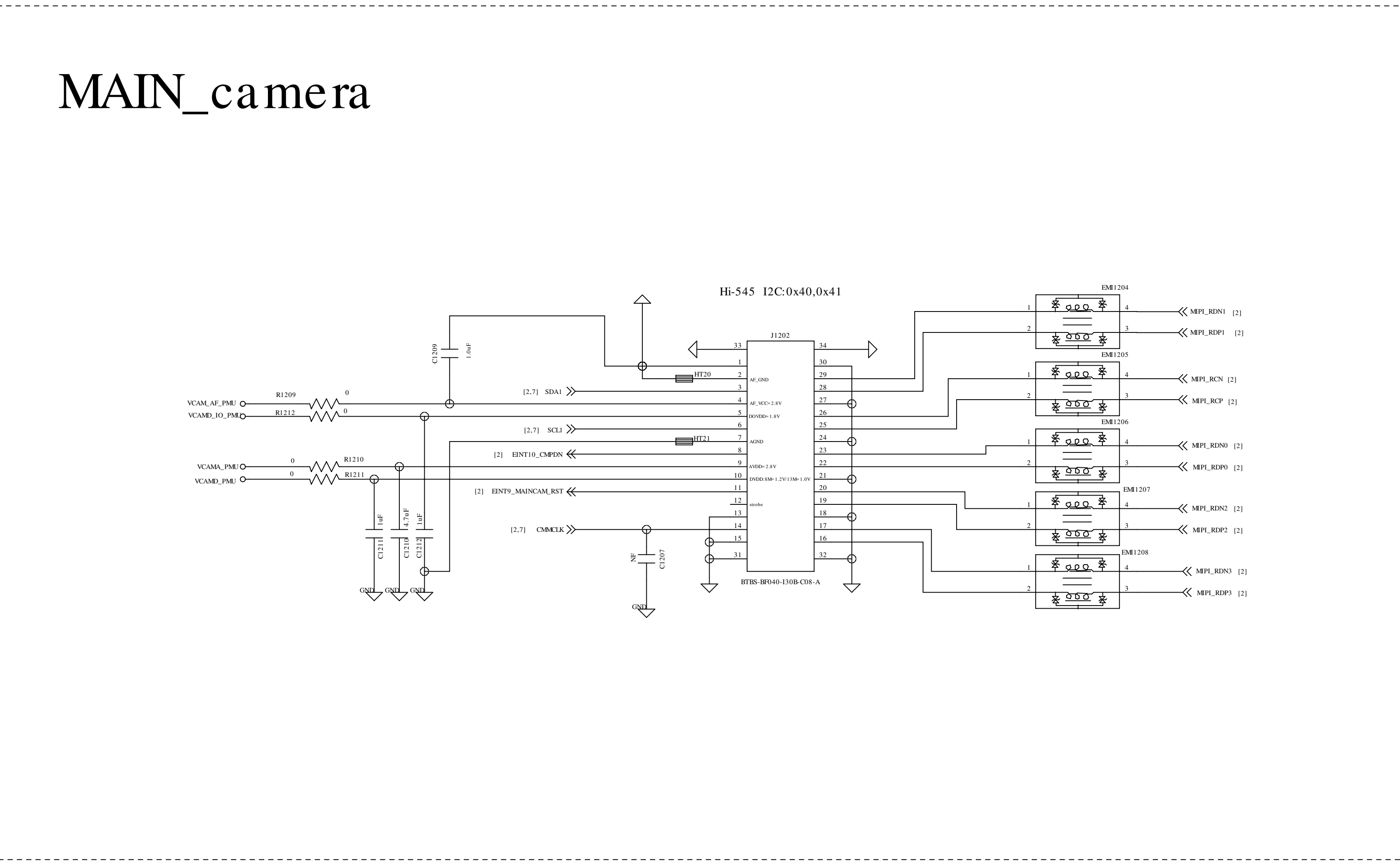
CTP

Backlight LED Driver

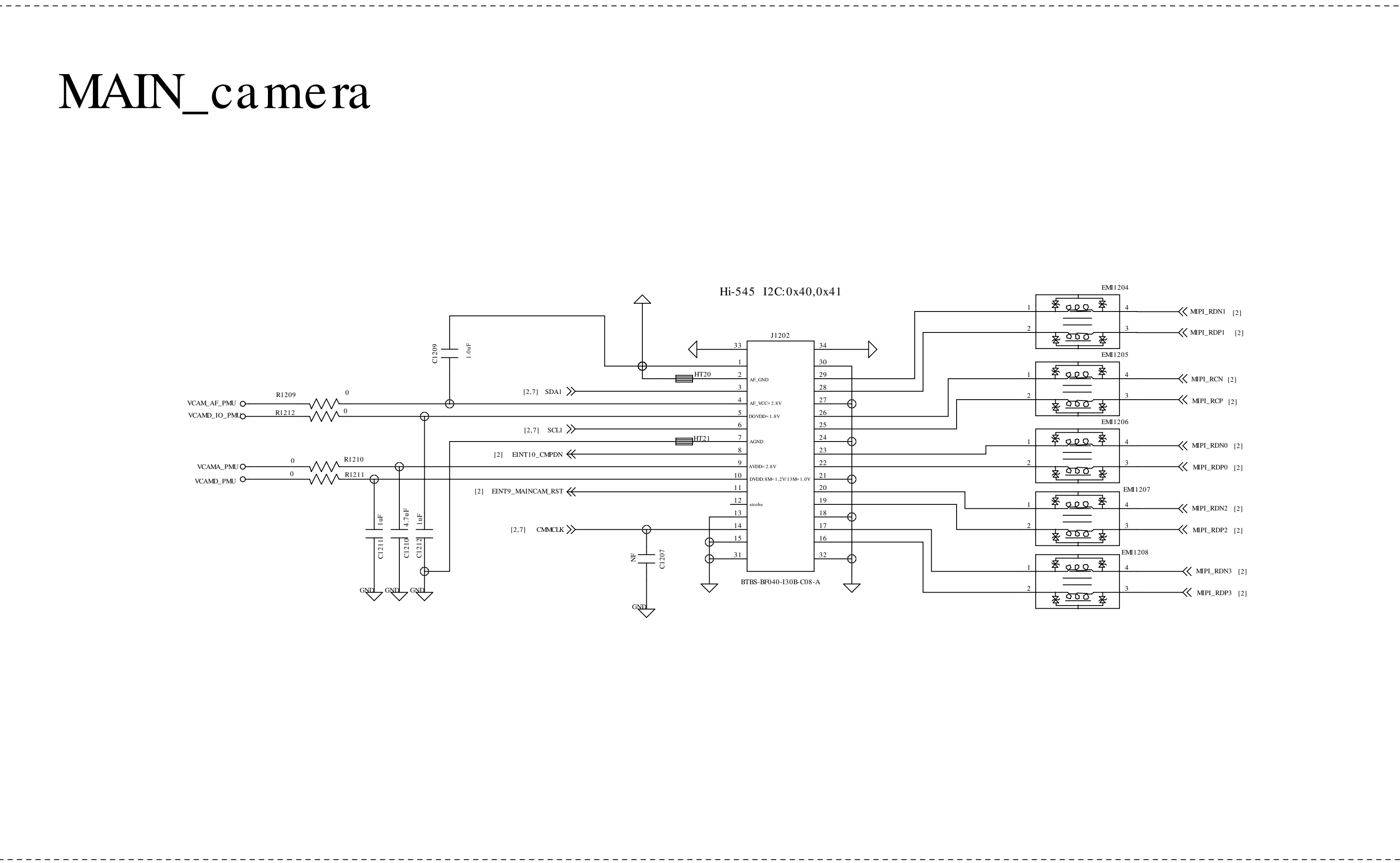
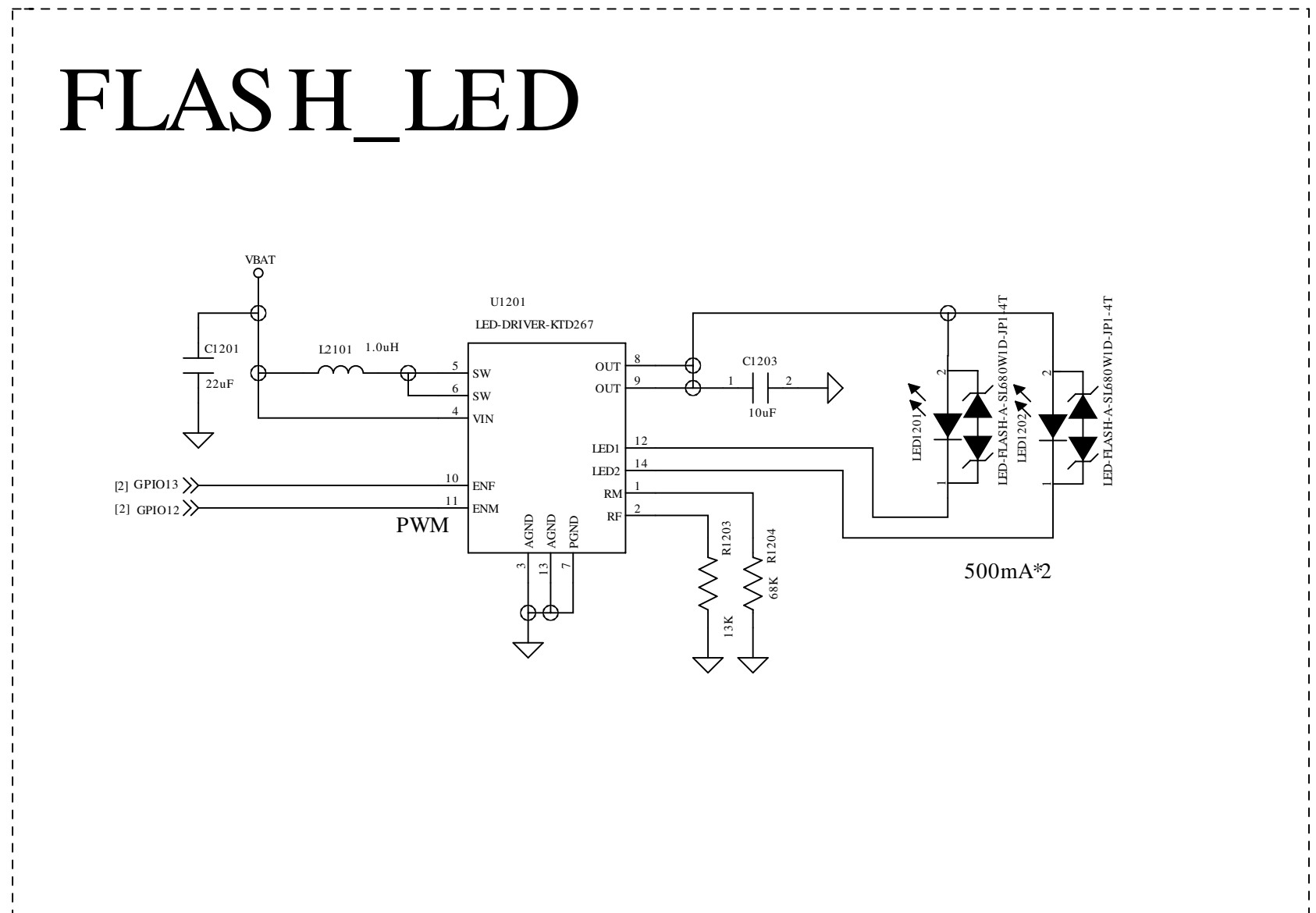
Ä-El 3*3·â×°
 <=8LEDs f-7 ¼Q Ö¼¼ÖÖÊ f-ÿÉ»2520·â×°

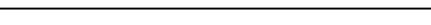
TITLE: LUA-U23		REV: V1.3
DOCUMENT NO.: 11_LCD_CTP_SUB		SIZED: A1
DEPARTMENT: Hardware DEPT.		
COMPANY: 		
DESIGNER: <DESIGNER>	Last Saved Date: 2015/12/7	SHEET: 6 OF 13

FRONT_camera

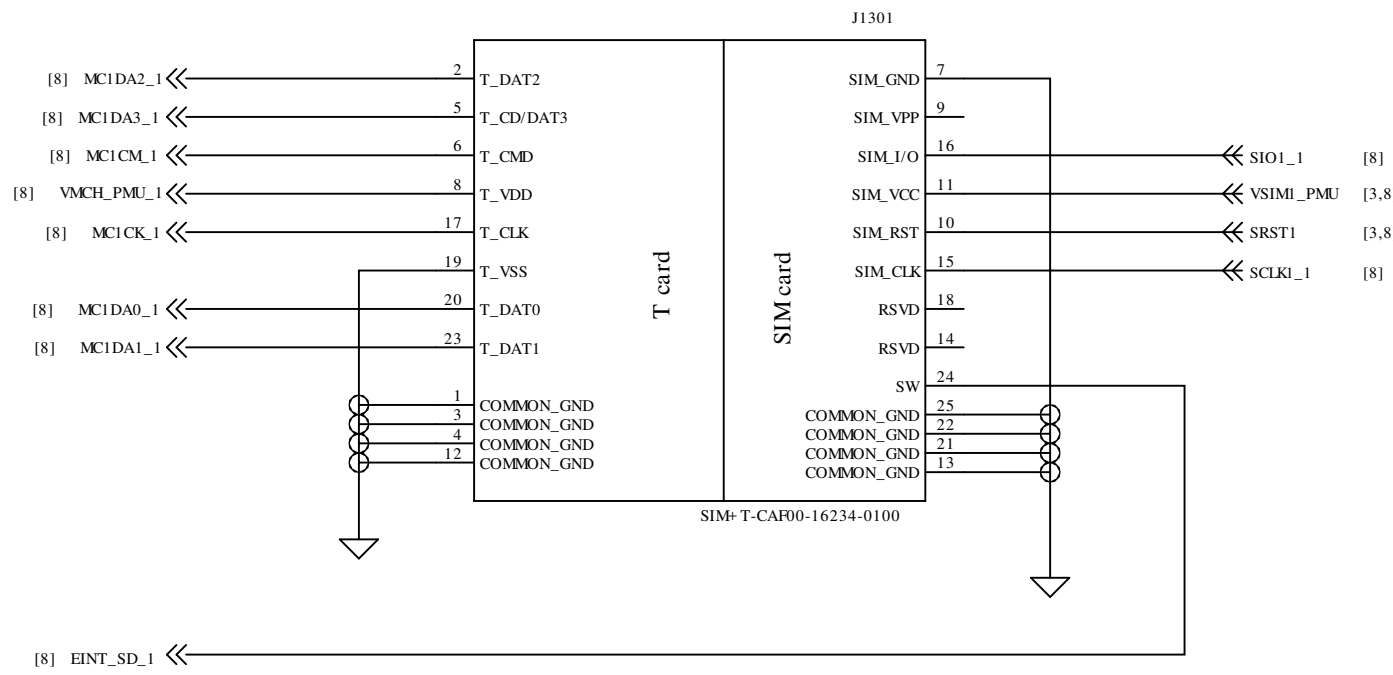
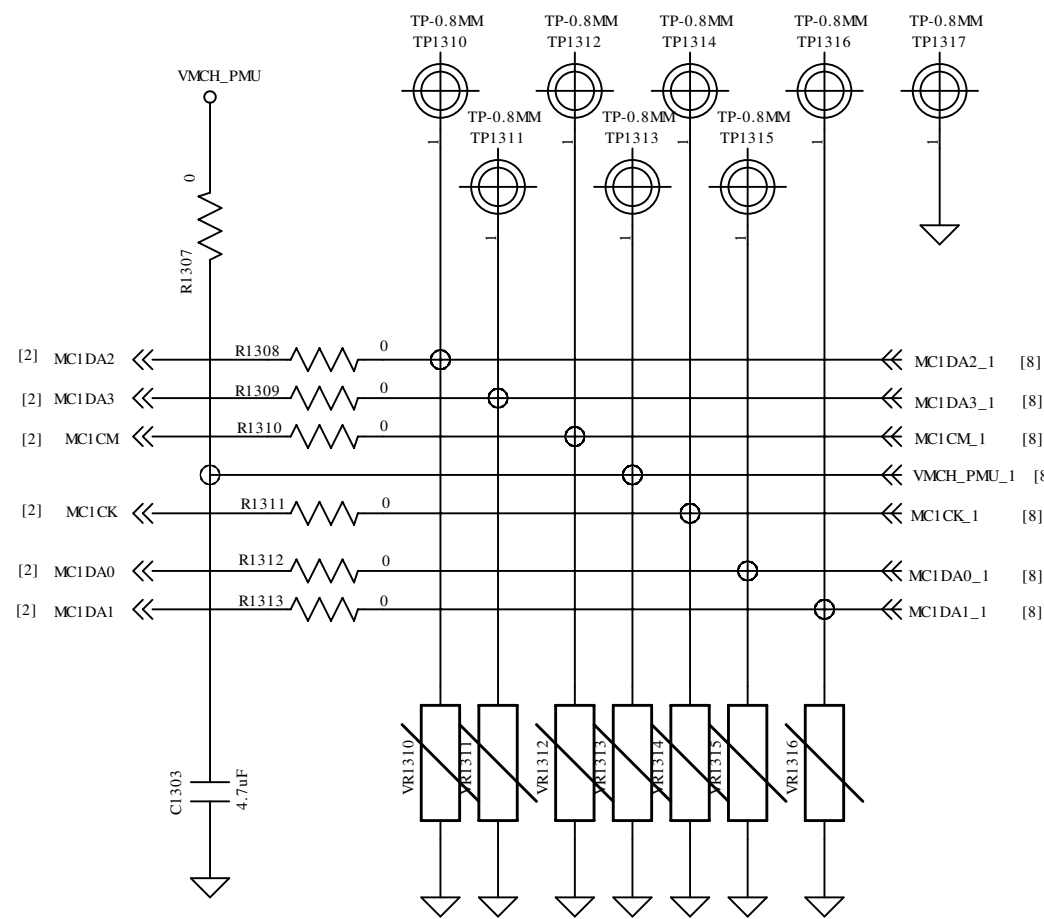


MAIN_camera

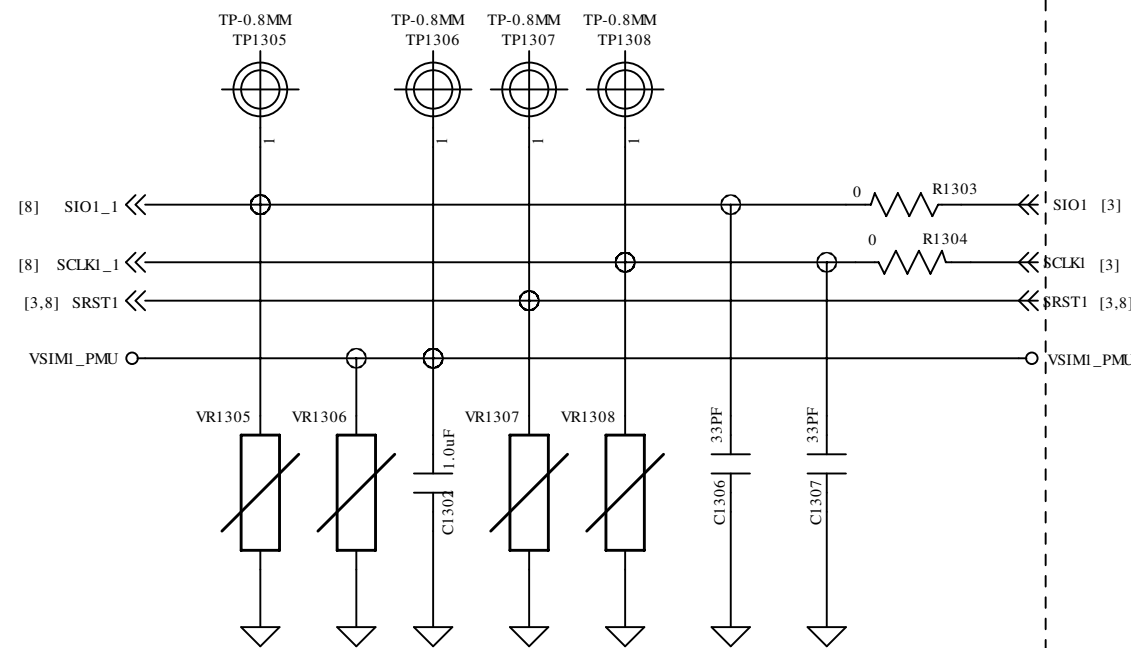
[illegible]

TITLE: LUA-U23		REV: VL3
DOCUMENT NO.: 12_CAMERA	SIZED: A1	
DEPARTMENT: Hardware DEPT.		
COMPANY: 		
DESIGNER: <DESIGNER>	Last Saved Date: 2015/12/7	SHEET: 7 OF 13

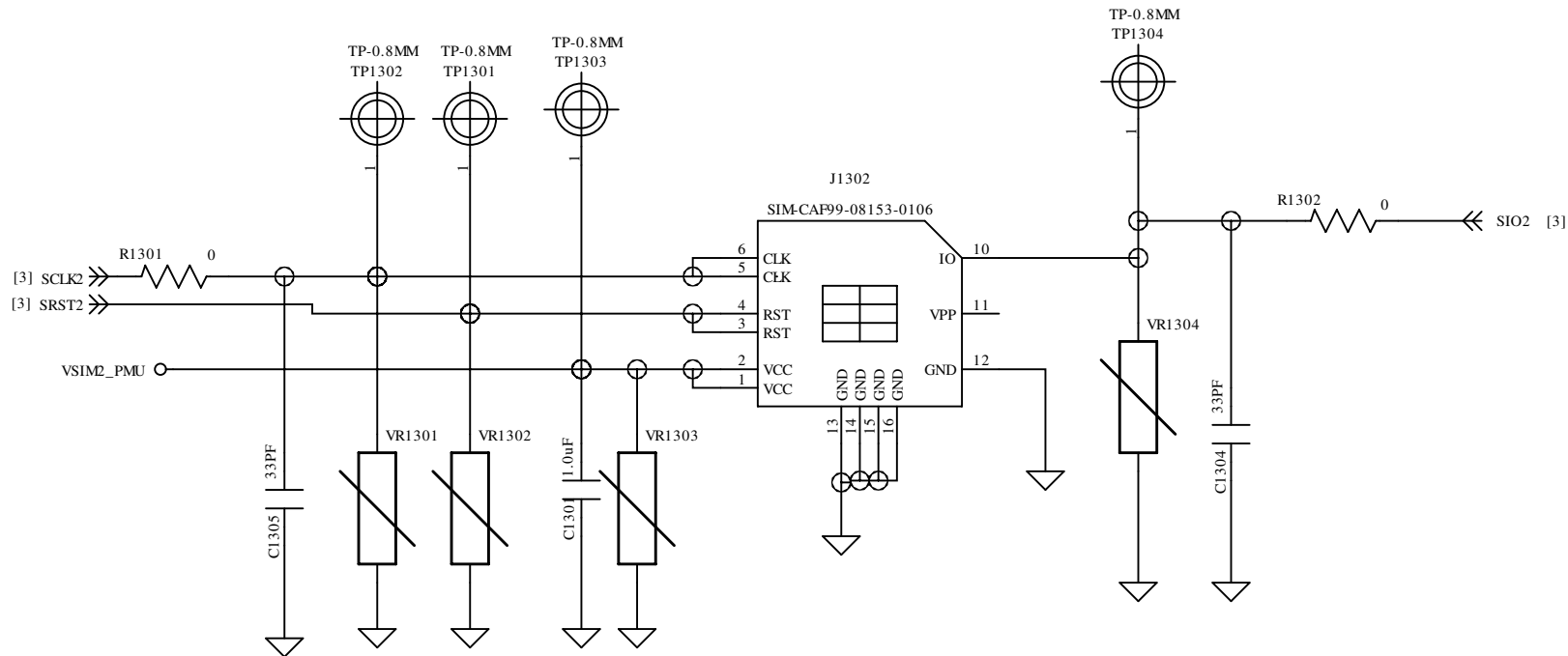
SD CARD

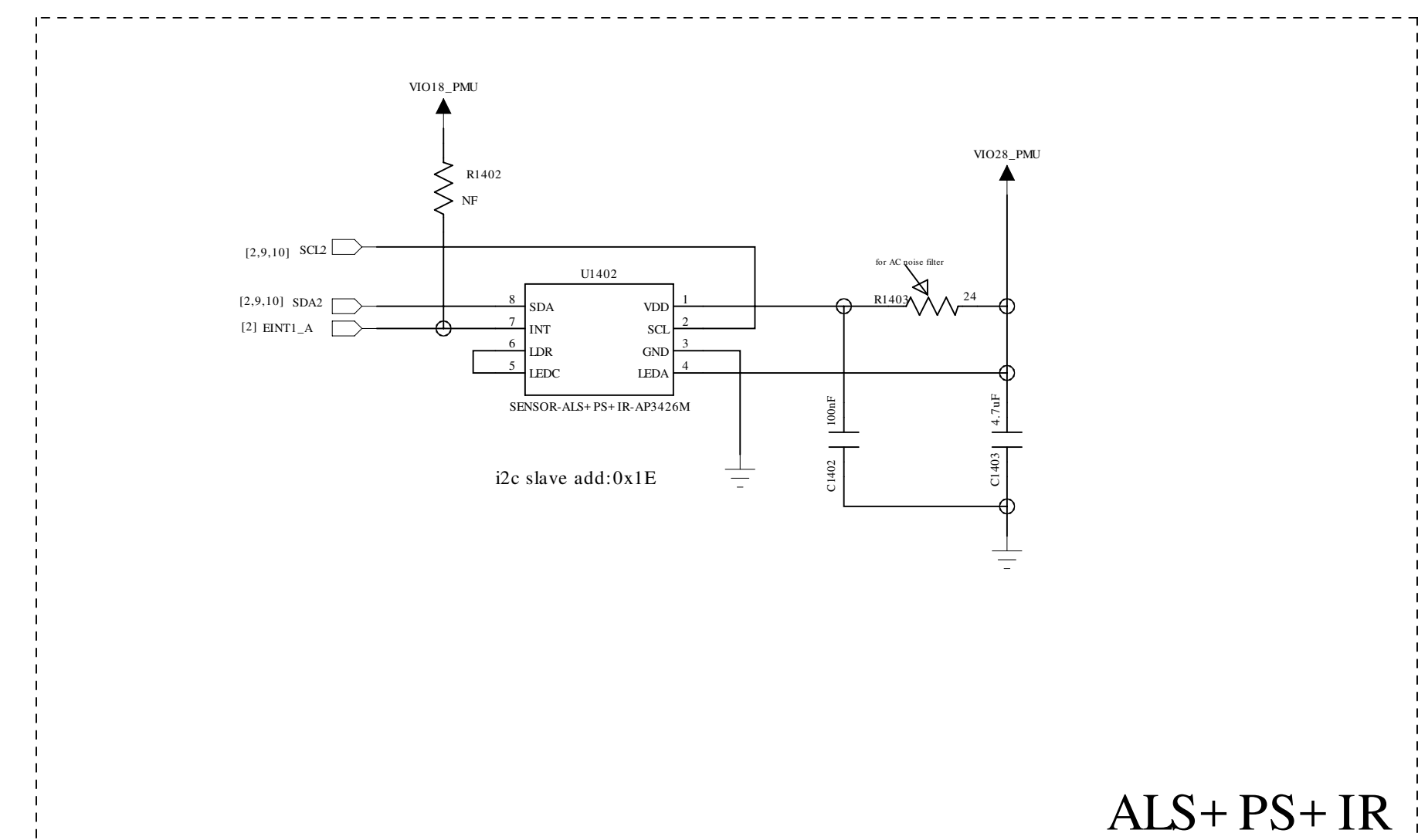
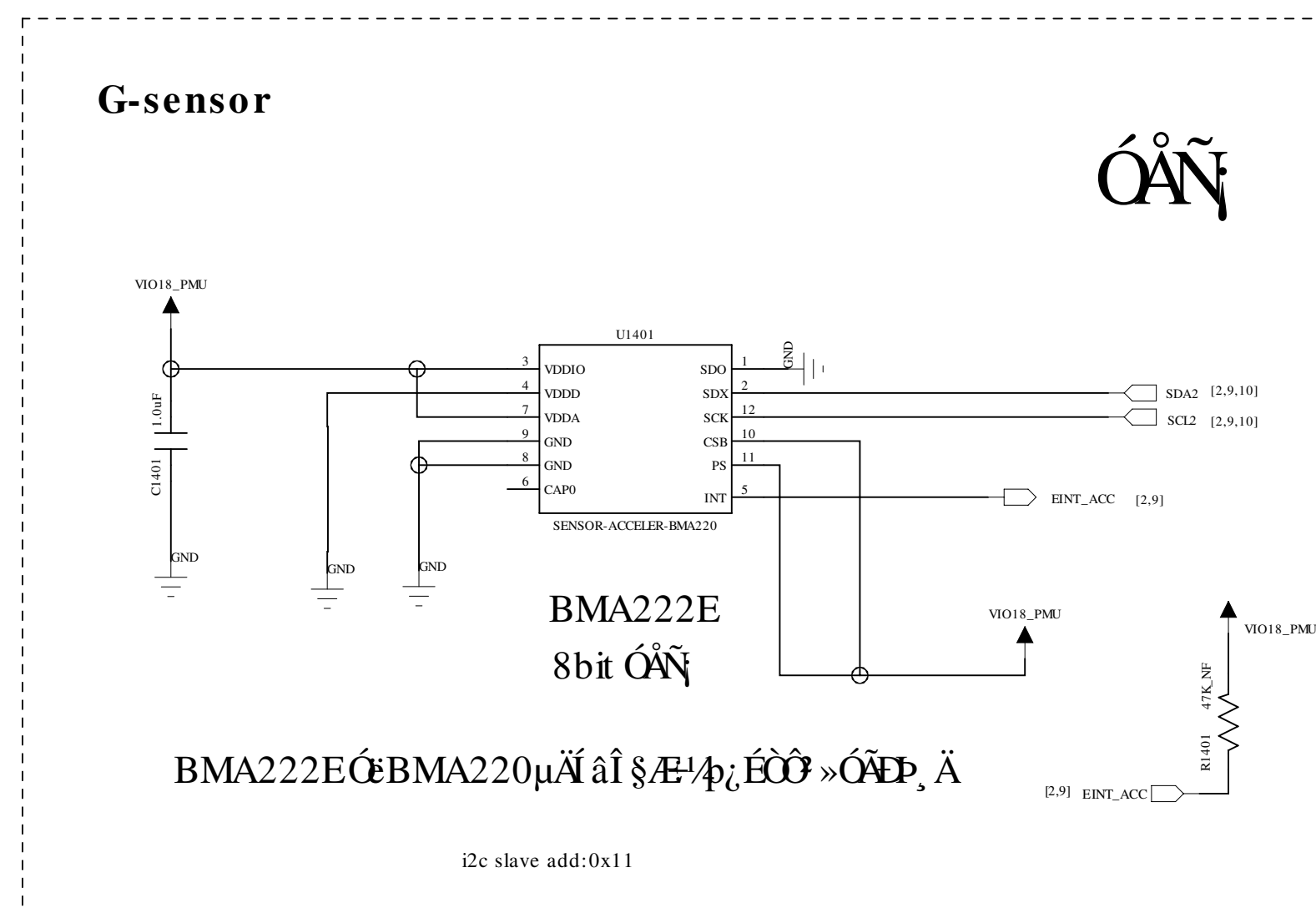


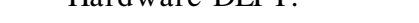
SIM1



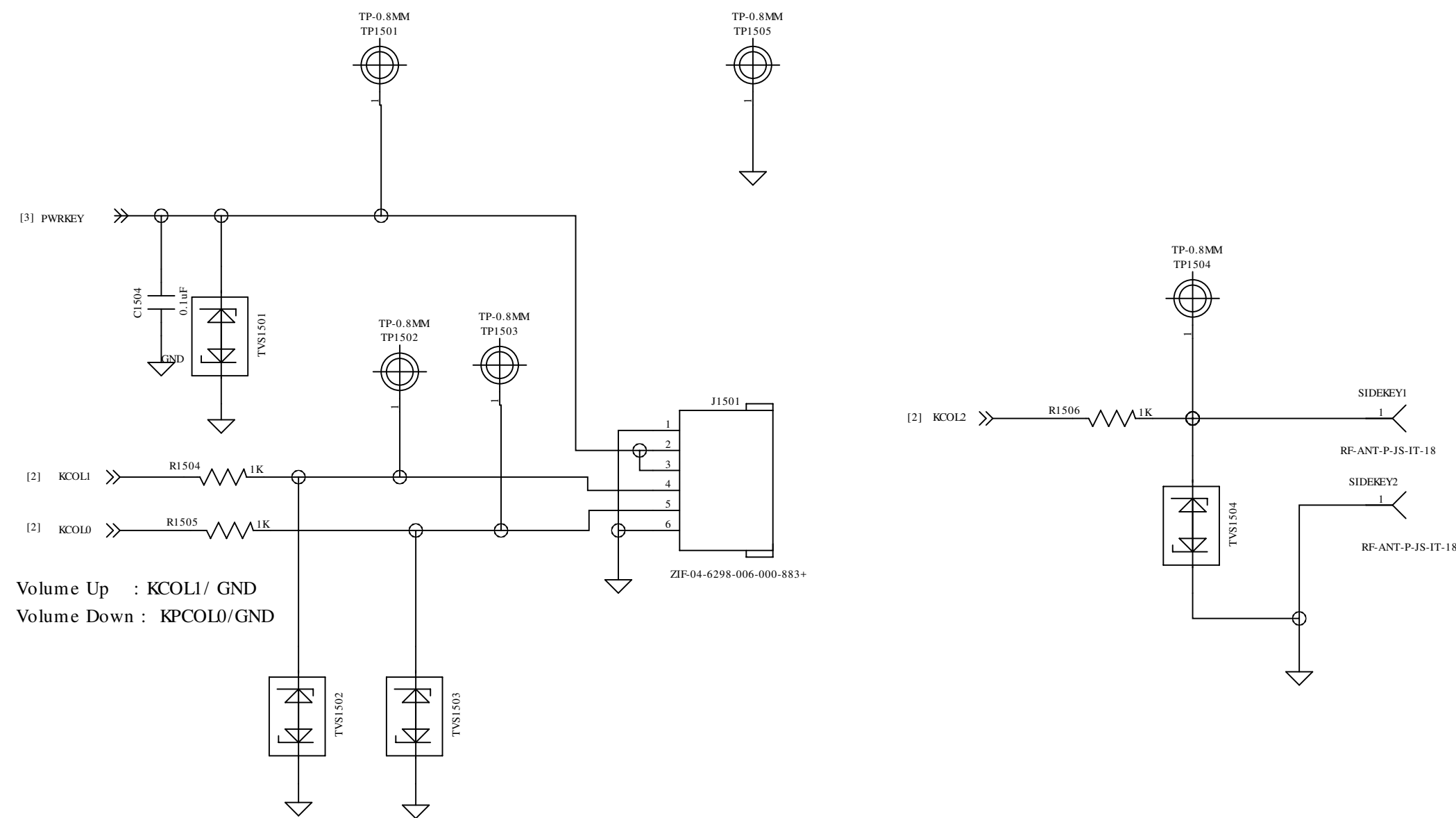
SIM2



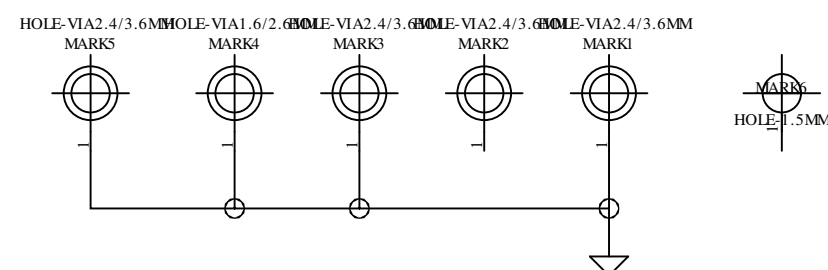
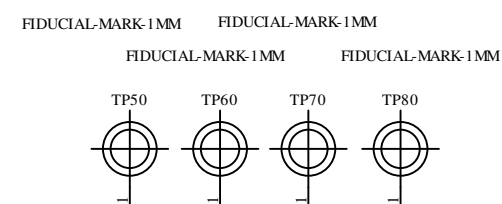
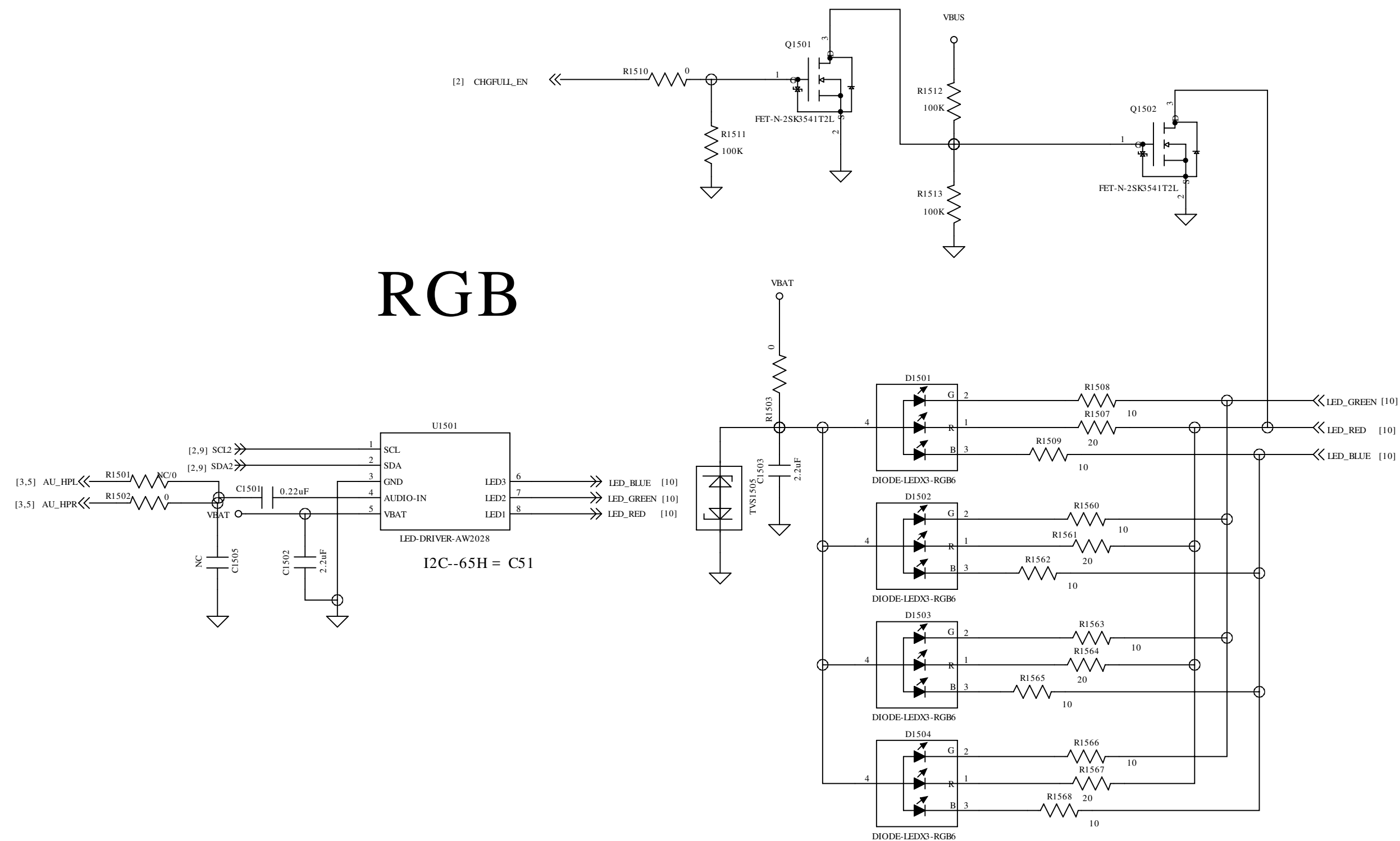
Gsensor¹ ©~ø² »¶·^{3/4} ÄË«lay,ÄËÇ°ÊÎîñÊÎ½ ÒÈÓÃÑ BMA222E

TITLE:		LUA-U23		REV:		V1.3	
DOCUMENT NO.:		14_SENSORS		SIZED:		A1	
DEPARTMENT:		Hardware DEPT.					
COMPANY:							
DESIGNER:		< DESIGNER >		Last Saved Date:		2015/12/7	
				SHEET:		9 OF 13	

KEY



RGB



TITLE	LUA-U23	REV	V1.3
DOCUMENT NO.	15_KEY_LEDS	SIZED	A1
DEPARTMENT	Hardware DEPT.		
COMPANY	WINGTECH		
DESIGNER	< DESIGNER >	Last Saved Date	2015/12/7
SHEET	10	OF	13

RF9810 control logic table

Enable VetC VetB VetA					
LB_GMSK_TX	H	L	H	L	
HB_GMSK_TX	H	L	H	H	
LB_EDGE_TX	H	L	L	L	
HB_EDGE_TX	H	L	H	H	
RX1	L	H	L	L	
RX2	L	L	H	L	
RX3	L	L	H	H	
RX4	L	L	L	H	

VBAT
VBAT [3]R: 7,10,11,12]

BP10~4 and 10~11 are 2G+3G mode both
BP15~9 and 12~14 are 3G mode only
(suggest BP15~9 = 1.8V)

[2] [2,1] ASPM_VREF1A << ASM_VCTR1A [2] [2]
[2] [2,1] ASPM_VREF1B << ASM_VCTR1B [2] [2]
[2] [2,1] ASPM_VREF1C << ASM_VCTR1C [2] [2]
[2] [2,1] VREF1 << WPGPA1 [2] [2]

[2] [2,1] VREF1 << WPGPA1 [2] [2]

[3] [3,1] DCXD_32K << DCXD_32K [2] [2]

VTCXD_PMI << R633 << VTCXD28-1 [1] [1]

VREF18_PMI << R634 << VREF18-1 [1] [1]

VREF18_PMI << VREF18_PMI

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

[2] [2,1] SRC1EN2A [2] [2]

Two Application Circuit Conditions,
1.TSX Circuit : X600= TSX, R653= R656= NC, R654= 100K+ -1%, R655= R657= 0ohm
2.XTAL Circuit : X600= Mobile XTAL, R653= R656= 0ohm, R654= R655= R657= NC

[3] AUXADC_REF <<Route AUXADC_REF with 4mil trace width

[3] AUXADC_TSX <<Route AUXADC_TSX with 4mil trace width

[3] GND_AUXADC <<Route AUXADC_GND with 24mil trace width

under AUXADC_REF/AUXADC_TSX trace

Connect TSX/XTAL GND
to GND_AUXADC first
than connect to main GND

Route AUXADC_REF/AUXADC_TSX as differential trace with well GND shielding
and route AUXADC_GND with 24mil trace width under
AUXADC_TSX/AUXADC_REF trace to provide return current path.

MODE	Logic	DCXD_32K_EN	XMODE	VXDDIG
DCXD + 32K XO	0/GND	1(VT018)	1(VT018)	1(VT018)
DCXD + 32K Less	1(VT028)	1(VT028)	1(VT028)	1(VT028)

[1] VTCXD28-1 << R616 << DCXD_32K_EN [1] [1]

[1] VTCXD28-1 << R618 << XMODE [1] [1]

[1] VTCXD28-1 << R617 << VXDDIG [1] [1]

[1] VTCXD28-1 << R617 << VXDDIG [1] [1]

[1] VTCXD28-1 << R617 << VXDDIG [1] [1]

[1] VTCXD28-1 << R617 << VXDDIG [1] [1]

[1] VTCXD28-1 << R617 << VXDDIG [1] [1]

[1] VTCXD28-1 << R617 << VXDDIG [1] [1]

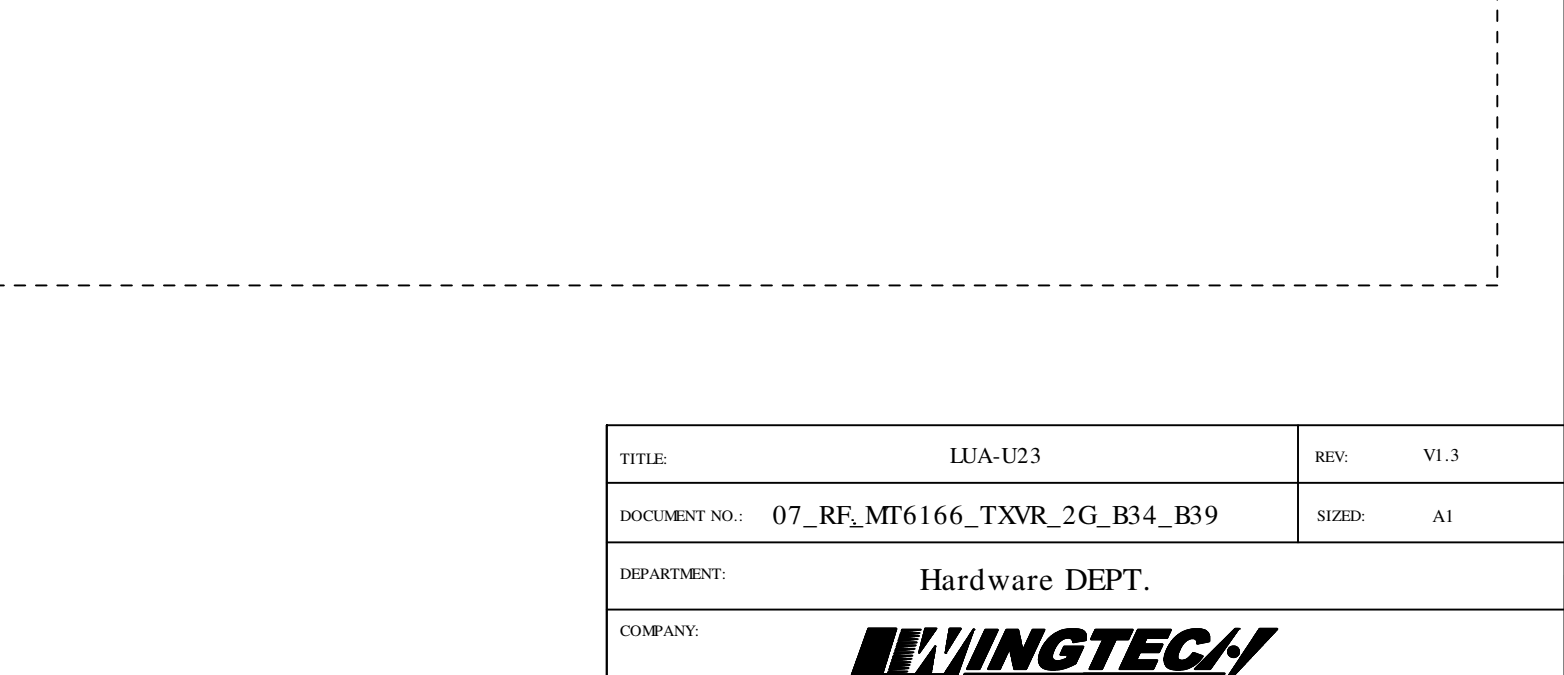
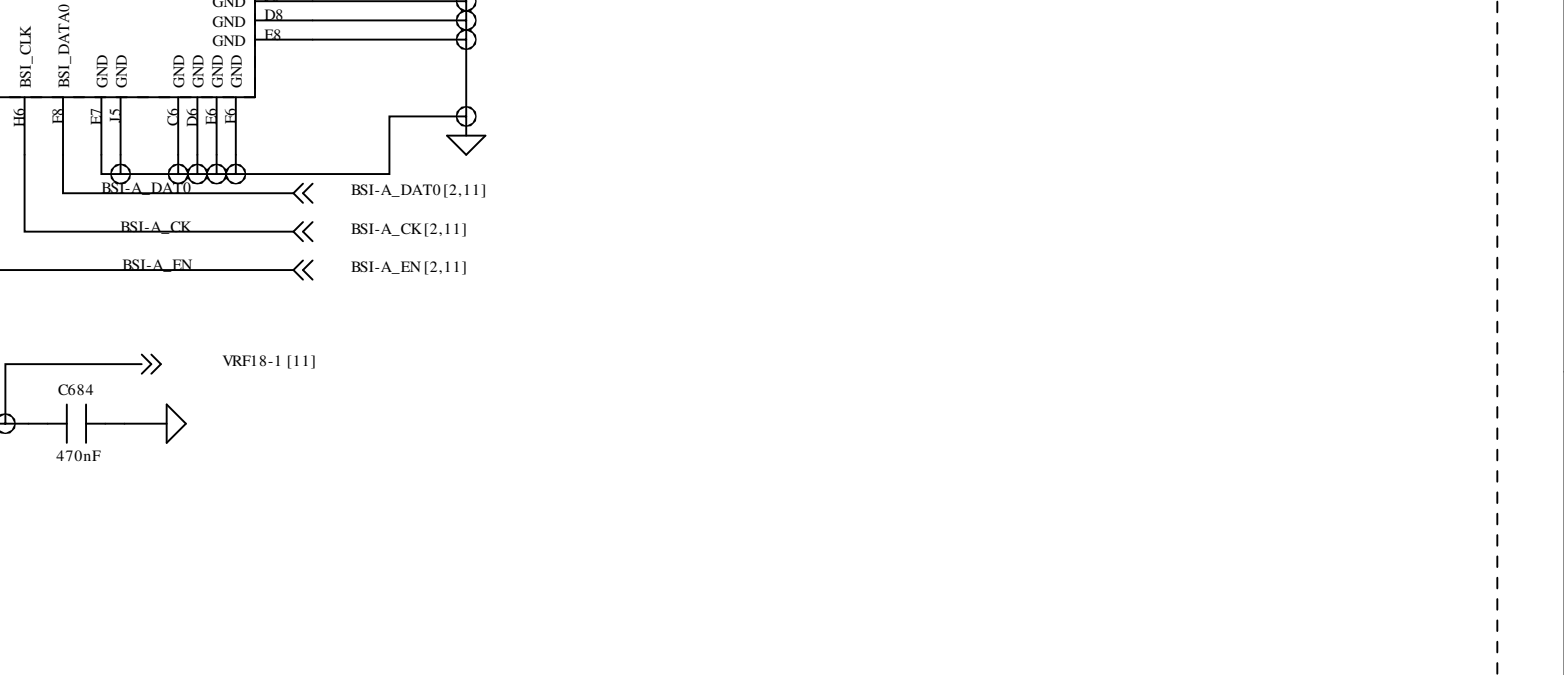
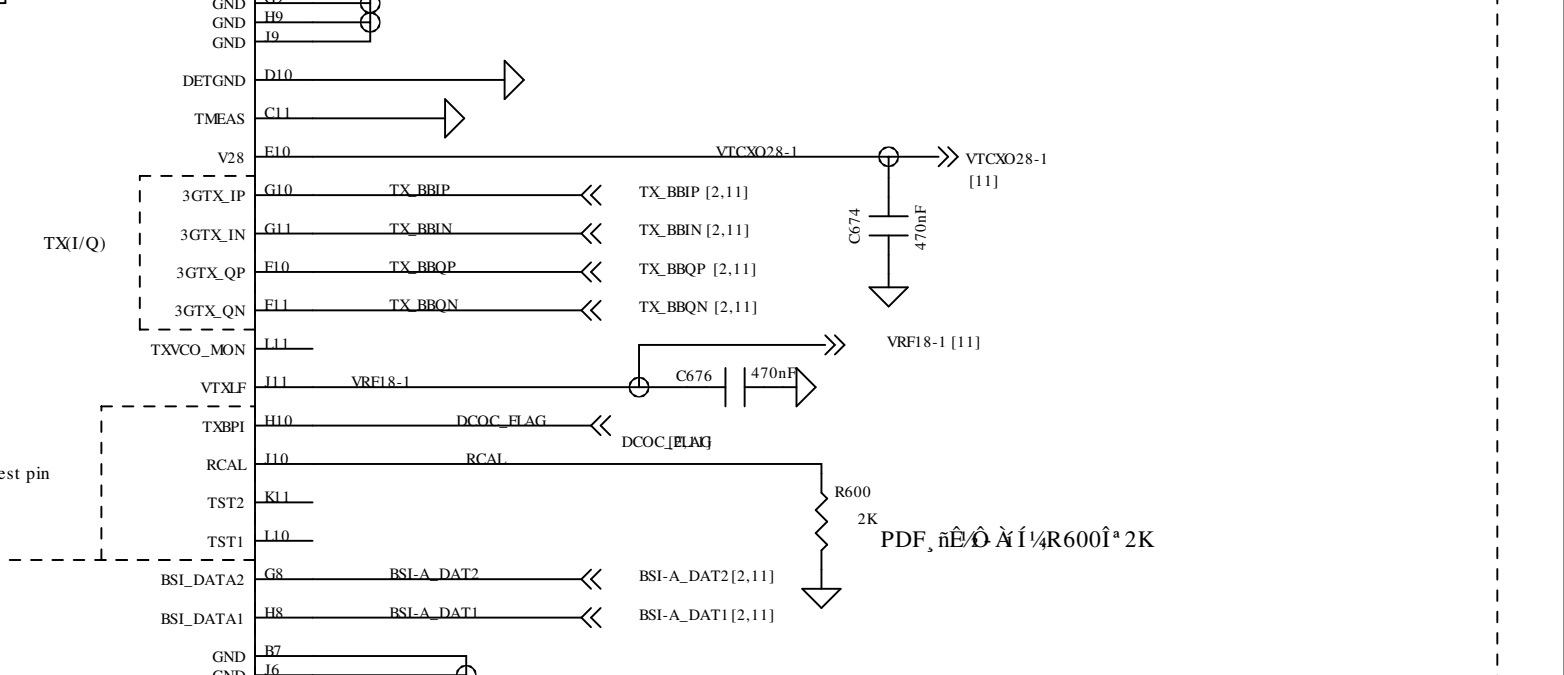
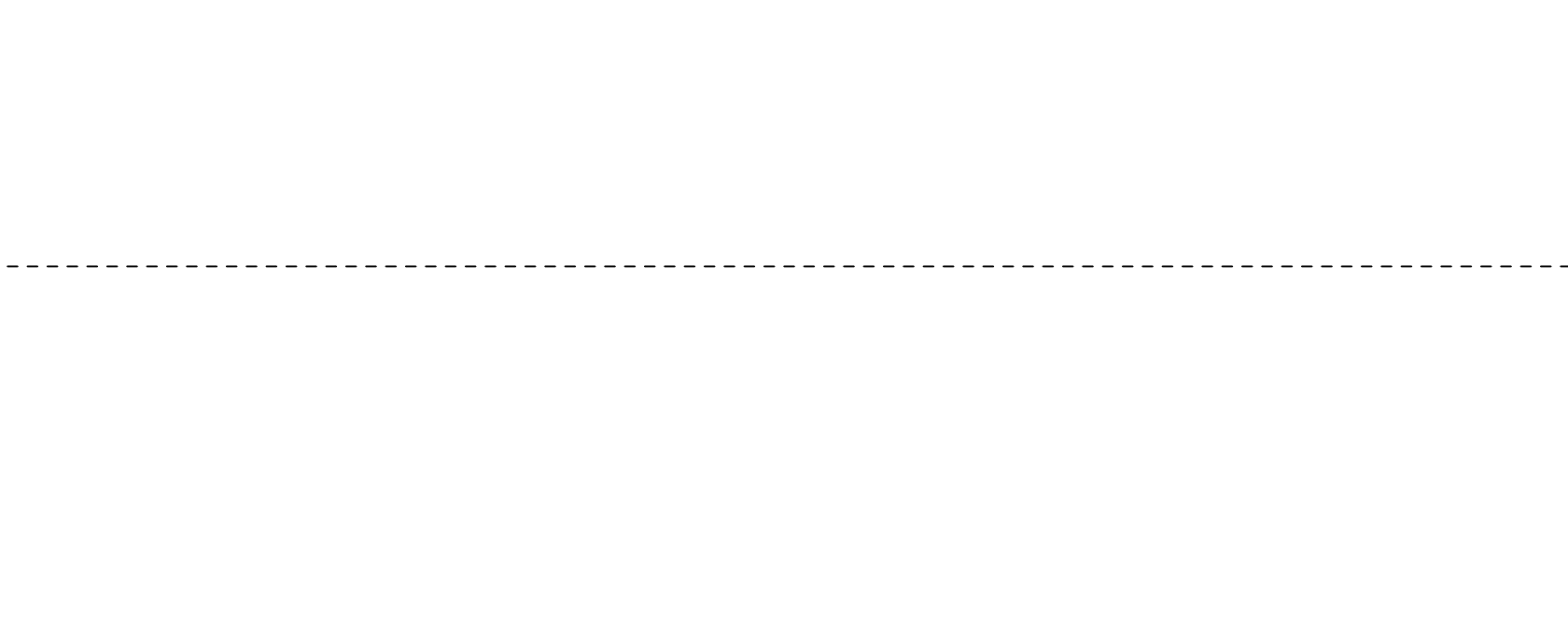
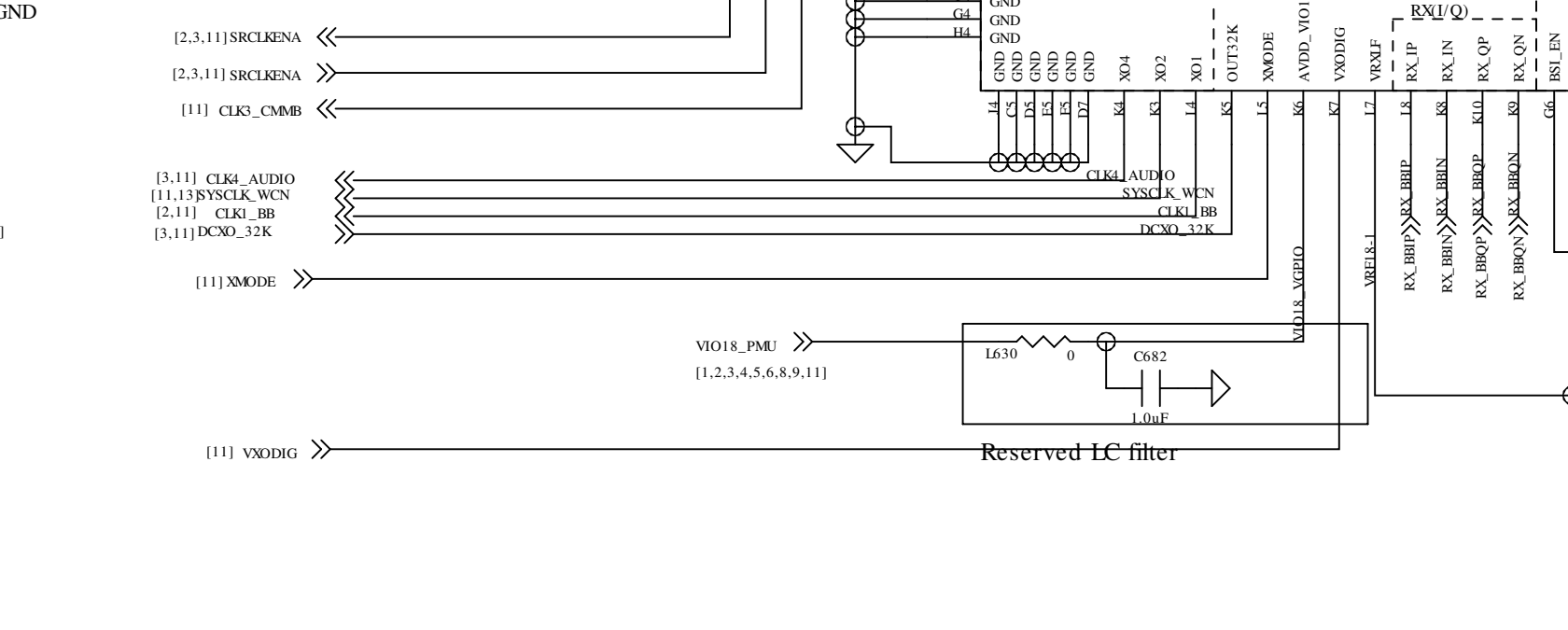
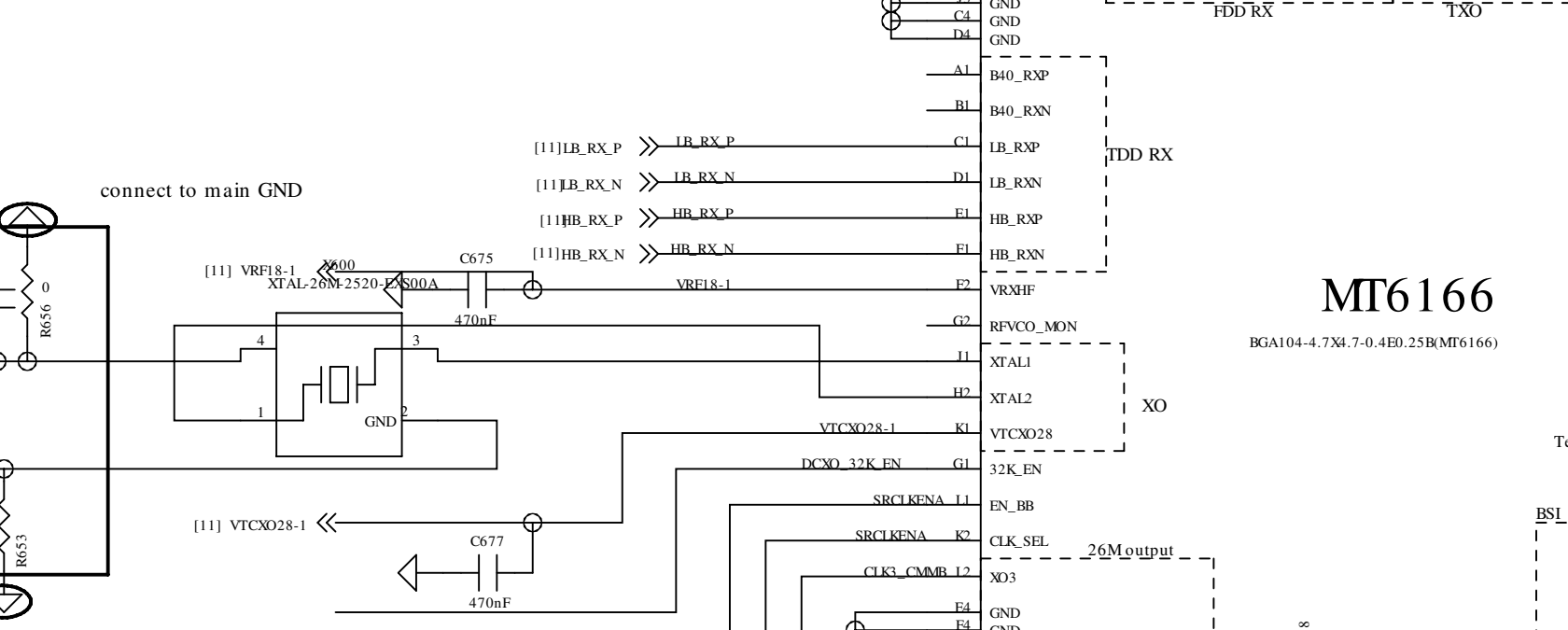
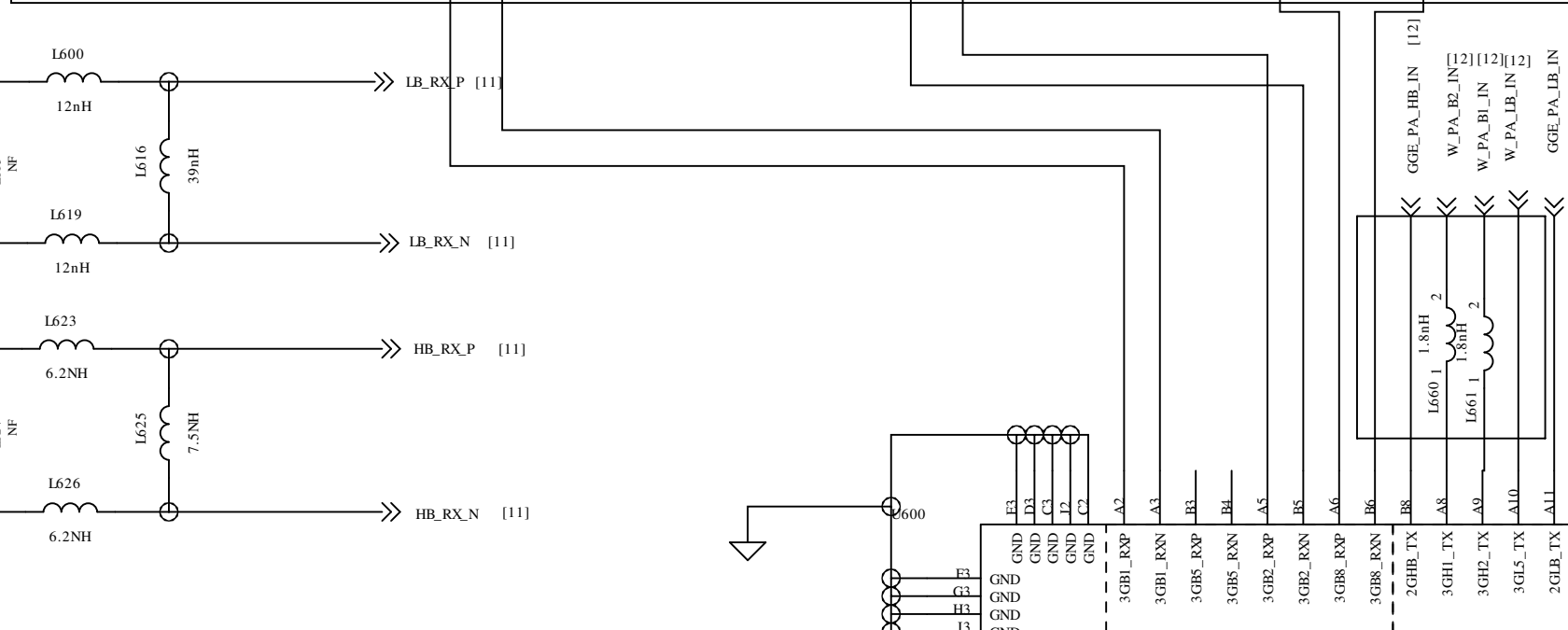
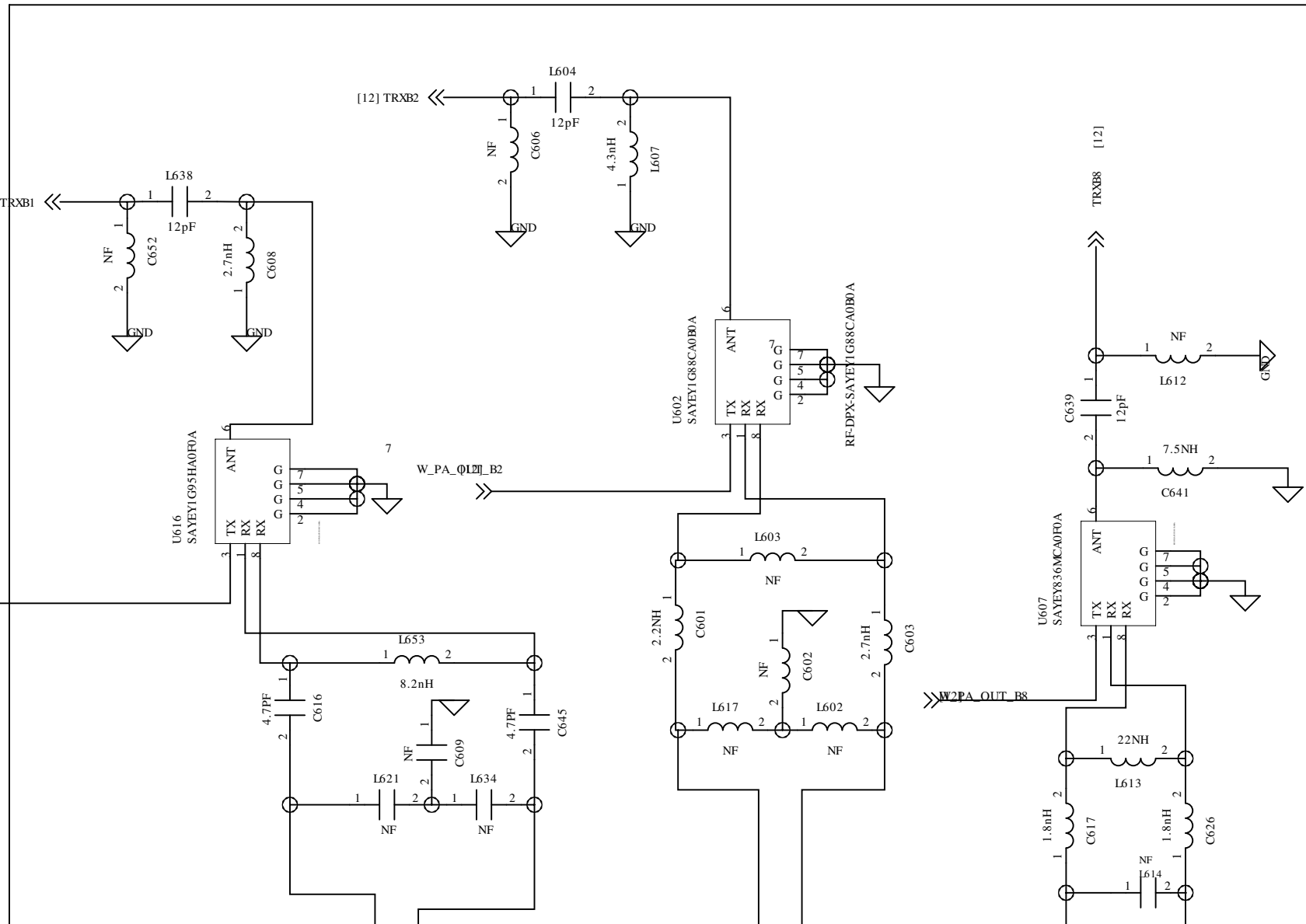
[1] VTCXD28-1 << R617 << VXDDIG [1] [1]

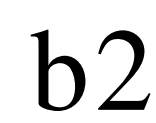
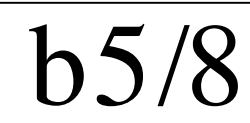
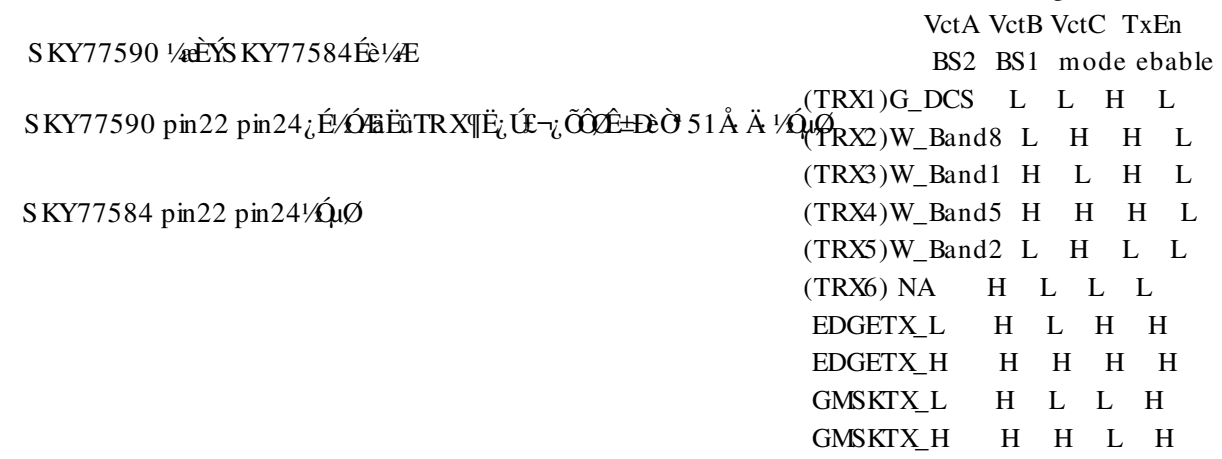
[1] VTCXD28-1 << R617 << VXDDIG [1] [1]

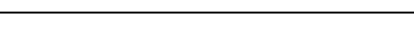
[1] VTCXD28-1 << R617 << VXDDIG [1] [1]

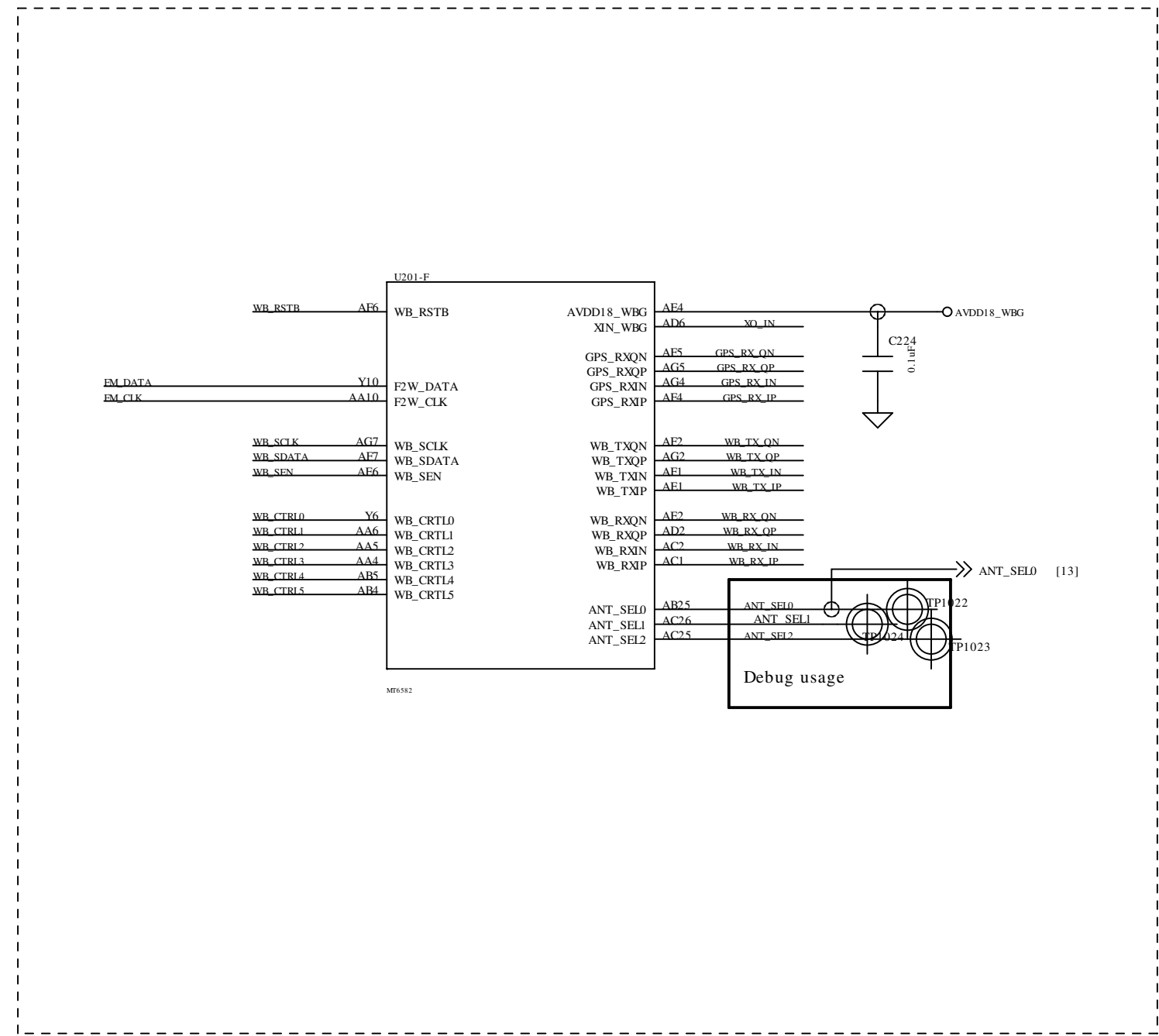
[1] VTCXD28-1 << R617 << VXDDIG [1] [1]

[1] VTCXD28-1 << R617 << VXDDIG [1] [1]





TITLE: LUA-U23		REV: VL3
DOCUMENT NO.: 08_RF_MT6166_WCDMA		SIZED: A1
DEPARTMENT: Hardware DEPT.		
COMPANY: 		
DESIGNER: <DESIGNER>	Last Saved Date: 2015/12/7	SHEET: 12 OF 13



TITLE: LU/A-U23		REV: VI.3	
DOCUMENT NO.: 10_WIFN_BT_GPS_FM_MIT6627		SIZED: A1	
DEPARTMENT: Hardware DEPT.			
COMPANY: 			
DESIGNER: <DESIGNER>	Last Saved Date: 2015/12/7	SHEET: 13 OF 13	